HJALMAR SCHACHT

THE MAGIC OF MONEY

Translated from the German by PAUL ERSKINE

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I have often been called a financial wizard. The French edition of my book of memoirs 76 Jahre meines Lebens was published under the title Memoires d'un Magicien. The American edition has the title Confessions of the Old Wizard. Yet the truth is that nothing in the world has so little to do with magic as dealing with money. Money must be handled with clear and cool calculation. Anyone who does not obey this maxim is in danger of tying himself up in all the many ways of earning and spending money. Money can no more be conjured into existence than the alchemists were able to make gold. But money has many different kinds of attributes, some of them very intricate, so that the majority of people frequently find themselves unable to understand certain financial transactions. For this reason the monetary system is enveloped in a cloak of mystery, secrecy and magic.

Money is not always synonymous with wealth. It is true that we call well-to-do people millionaires, and thus unwittingly link this term with the currency concept – Mark millionaire, Dollar millionaire. But wealth is not only money. It makes a great difference whether a millionaire possesses one million Deutschmarks in cash or in his bank account, or whether he owns property of the same value. The difference lies in the ways in which such wealth can be used. Money may at any time be converted into other goods, other properties, or other people's services, but the reverse is not true. The magic of money lies in its protean nature, which enables it to be used at all times, in all directions and for all purposes. This constitutes its wizardry, its secret, its mystery, its magic.

Hardly any other object of human culture has been judged in so many different and contradictory ways as has money. Here it is praised to the skies, there it is cursed and condemned. For some it is man's highest good, for others it is despicable. Yet once one has mastered certain principles, nothing is so easy as dealing with money. The most important of these is the difference between 'yours' and 'mine'. Many failings in the field of money occur not because of any intention to deceive, but simply because those dealing with money lose sight of the concept of property.

The fact that money can at any time take the place of other material goods effaces its boundaries. Besides this, the fact that the so-called double entry system of book-keeping has introduced impersonal in addition to personal accounts, is confusing for the inexperienced. To complicate matters, credit transactions, which are indispensable in trade and commerce, make it possible to confound present with future money. Borrowed money is never property, is never 'mine'; it belongs to others and is thus always 'yours'. But even the most inexperienced are sure about one thing: money is a possession which brings many and great advantages in its wake. In the primitive barter economy of past ages it was difficult to accumulate extensive wealth. It was impossible to add indefinitely to one's herd of cattle (pecus-pecunia), because the supply of fodder and accommodation was limited, and because cows are mortal. But with money it was and is possible to acquire anything at any time, and to preserve it.

The invention of money was the pre-condition for the development of the modern national economy. Money became the epitome of property. For this reason the need to acquire money is, next to love, the most universal of human urges. How to make money – this question and its attendant problems engages more of man's thoughts and efforts than almost anything else. The correct answer to the question is: through work and saving. But work requires exertion, and saving means forgoing the immediate utilisation of income – and thus privation, loss of present comforts. This requires a strength of character not possessed by everyone.

For this reason men's thoughts turn to other ways of making

money. Such ways, requiring less effort, or at least less physical effort, and offering much scope to human fantasy, have gradually developed in our modern economy. People are always trying to get something for nothing – to bet, enter lotteries, speculate on the stock exchange, and lend their savings for interest. They speculate not only with their own but also with borrowed money. Here the magic of money actually becomes tangible. The amount of work involved in these ways of making money is not very great. Men also hope for strokes of good fortune which will make them rich, for accidental discoveries of mineral deposits, for appreciation in the value of land, for gifts from rich benefactors, or even for pennies from heaven. Whichever way is chosen 'everyone clamours for gold, everything depends on gold'.

The significance of money as personal property is not restricted merely to man's normal day-to-day needs. Not only do monetary riches permit a greater enjoyment of life by making it possible to acquire the goods and services necessary to live, eat and dress well, by enabling one to travel and to develop the mind and spirit, and by affording the means necessary to employ one's leisure to the full; money also gives its owner power over other people, and over the direction of social life. All goods can be bought with money. Money buys other people's labour which can be freely employed for one's own social or economic purposes. Money empowers those who wield it to make use of personal or material forces. 'If I can afford six horses, is their strength not mine? They make me feel like a real man, as if I had twenty-four legs.' He who has money can control the means of production - a fact which led Marx to demand that these means of production should not be left in private hands, but turned into public property - collective ownership.

The high-sounding sentences about Socialism which Marx linked with his theory no longer have the meaning Marx gave them. Since his demands have today largely been met and are accepted as justified by nearly all political parties, these phrases are no longer appropriate to the economic problems of our time. Today there is hardly a politician who would not maintain that his thinking is socially oriented. Now, the question is rather whether the means of

production are managed more effectively by a collective enterprise or by individual initiative. This is decided above all by results: all efforts, whether individual or collective, must aim at achieving the greatest possible volume of production. Collectivism, however, excludes competition, and it is only through competition that the most successful and the most able can exercise a decisive influence on the social product. Competition brings the best to the top and provides us with the means necessary to live life to the full, provides us with money, property, and wealth.

He who makes money also wishes to benefit from it: he is not concerned merely with creating for others, but also – and probably principally – with improving his own lot. Therefore the problem of the economically active society is not so much one of manipulating the means of production, but more one of distributing the social product. The inequalities in the distribution of the social product which have existed for thousands of years and the contrast between rich and poor will always remain in being. They are the difference between the successful and the unsuccessful, between the talented and the untalented, between the able and the incapable, between the diligent and the indolent.

The economy is governed spiritually and intellectually by technical and organisational ideas and institutions. New techniques, new organisations, new combinations, are expressions of the spirit, They originate in the mind of a single individual, never in a multitude of individuals, never collectively. Even if an industrial enterprise is subject to the decisions of a collective consortium, in each consortium new thoughts and ideas always come from individual members. And all depends on whether such individuals prevail over the collective or not, that is, whether understanding and reason triumph over natural indolence. Here, it is not a question of a mere expression of ideas, but of putting these ideas into practice. This is difficult in any kind of group because the habitual interests and ordinary ideas of the majority must dominate. It was with justice therefore that philosophers and poets have said 'Reason has always been the preserve of the few, the majority prefers nonsense'. The consortium is ruled by mediocrity. Every consortium deliberates

slowly and clumsily. For this reason the masses in times of emergency have often, perhaps too often, granted an individual absolute powers.

Fortunately, the saying that everyone clamours for money is not altogether true. Making money is always bound up with risks. He who seeks profits must be able to bear losses. To acquire riches by legal means requires talent, diligence and the renunciation of comforts. Most men lack these qualities. For them a moderate income enabling them to enjoy life's 'simpler pleasures' is sufficient. They eschew risks. Security of income is worth more to them than a possible but doubtful profit. Security of work, and provision for illness, old age, injury and unemployment, are therefore in the forefront of social controversy.

On the other hand, there are many people who seek goals other than mere security of existence. It is true that this is a minimum requirement of every family, yet many individuals place great value on performing some service in the spiritual, intellectual or social sphere, irrespective of whether or not they are rewarded. Scientists, soldiers, civil servants, clergymen, teachers, politicians, writers and many others fall into this category. They see their task as fulfilling their duties in the fields chosen by or entrusted to them, thereby satisfying a real ambition. They are the moral and spiritual élite of political society. It is foolish to rebuke the ambitious. The progress of the world depends on them.

On a journey through Turkey which I made with some friends in 1909 the conversation turned to our future careers. I said 'One day I should like to be of service to the public, provided that I am then completely independent financially. I do not wish to be one of those officials who live in a constant state of anxiety because their economic existence depends on strict obedience of their superior's dictates. As an official I want to be able to return to private life at any time should my service lead me into conflicts of conscience or conviction.' Already then I saw that material dependance created spiritual bondage. He who works only to order has no pleasure in his work, and loses his creative powers, his initiative, his best faculties. My

assertion showed that though I did indeed wish to be financially independent, I placed service to the public higher than the mere making of money.

I have often put this concept to the test. When I returned to public life after my acquittal in Nürnberg, Kaisen, the Social Democrat president of the Senate of Bremen, tried to shame me by calling me the highest-paid official of the Nazi regime. I was able to shame him with the reply that when Hitler recalled me to the post of President of the Reichsbank I voluntarily and on my own authority reduced my salary to a third of that I had received under the Weimar republic.

When, in the middle of November 1923, I was made Reich Currency Commissioner, the following conversation took place between myself and the Salary Referee of the Reich Finance Ministry:

'I wish to bring my secretary with me,' I began. 'How much will she be paid:'

'Our secretaries receive a salary of DM (Deutschmarks) 200 per month.'

'That doesn't seem very much. At the bank Miss Steffeck had a salary of DM 600 a month. What is the salary of the Reich Currency Commissioner?'

'He is paid DM 400 a month.'

'Compared to my present income that doesn't seem very much either. But I have a suggestion: if you grant Miss Steffeck my salary, as well as that due to her, she will still have DM 600. I, for my part, will renounce my salary.'

'Do you mean to say you will work for nothing?' asked the government official, disconcerted.

'On condition that you pay my secretary DM 600, yes.'

Just think of it: the man who would have the task of ending the worst currency inflation in history was expected to be content with a salary of DM 400 a month! How could I, with a family of four, have undertaken such an office if I had not been able to defray my living expenses out of savings? I gave up my highly-paid post as principal of one of the four largest German banks, I resigned from over seventy lucrative positions on supervisory boards, all because

an ideal drew me on. I could do so only because out of my own resources I had made provision for a normal civilised life.

But it is not merely economic power which can be bought with monetary riches. Much more significant, and often also more fatal, is the influence of money on a man's spirit and character. Here I leave aside all cases of direct bribery and corruption, and will speak only of everyday occurrences. In all democracies members of parliament are elected by the public. Freedom of speech and opinion is one of the fundamentals of political life. Public expressions of opinion have the aim - and cannot have any other - of gaining adherents for one's opinions, and thereby achieving a party majority. As long as political bodies were small, this was a simple task; with today's masses it is difficult. Nowadays one can reach the voter only by means of the mass communication media. The necessary propaganda is spread by meetings, the press, radio, television, and political pamphlets. For all of which vast sums of money are required. He who can dispense the largest sum of money has the best chance of gaining supporters. Since dominance over public opinion offers countless opportunities for influence in and profit from political life, the modern political institutions, state, municipality, and public authorities are subject to a process of opinion-fabrication, which often serves special interests and not the common good. And all this because money talks.

The production and distribution of books and newspapers is an expensive business. Radio and television are also costly. Anyone who is able to afford these can exert a great deal of influence on the views and opinions of readers and viewers. If a single publisher can reach a daily audience of millions by means of his publications, this gives him a power which carries within it great potentials for good, but also great dangers of abuse. One can bet large odds on the likelihood that a reader or viewer who is bombarded daily with a certain point of view will make room for this view in his thinking and be influenced by it. He who promulgates his views with the largest amount of propaganda has the greatest chance of making these views prevail. The most succinct description of this state of affairs and its seriousness was given by Oswald Spengler: 'Today

we live so cowed under the bombardment of this intellectual artillery that hardly anyone can attain to the inward detachment that is required for a clear view of the monstrous drama. Three weeks of press work, and the truth is acknowledged by everybody. Its bases are irrefutable for just so long as money is available to maintain them intact. Its arguments are overthrown as soon as the advantage of financial power passes over to the counter-arguments and brings these still oftener to men's eyes and ears. Here also money triumphs and forces the free spirits into its service. A more appalling caricature of freedom of thought cannot be imagined. Formerly a man did not dare to think freely. Now he dares, but cannot.

The Americans have extended the phrase 'brainwashing' to apply to this state of affairs. This brainwashing has today become the most important means of shaping public opinion. Usually it goes by the more harmless name of 'public relations', and it is practised on a global scale. From innocent beginnings it has developed in some respects in a most ominous way.

The influence of money is not stopped by state boundaries. Some decades ago a book appeared in America called *Dollar Diplomacy*. In it the author showed contemporary examples of how American money influenced the governments, parliaments and economic circles of other lands to pursue political policies more friendly to America. Those in a position to grant large loans to other countries, who use their capital to develop industries in these countries will engender a friendly political reaction. There is a certain humour in the fact that such financial methods of gaining influence often occupy the foreground in the politics of so-called development aid.

The seductive power of money also frequently threatens the execution of justice. Even if in culturally-advanced countries corrupt judges have to all intents and purposes disappeared, there are still quite enough cases where the verdict has been influenced by the fabrication of opinion, engendered by money. History shows countless occasions where money was used to bend the ends of justice, and there was even a time when the large mass of people believed that money could buy them heavenly blessings. 'When the coin

rattles in the box, the soul floats up to heaven,' Hans Sachs mocked.

How questions of money can influence the course of justice is shown by the events I have lived through. I repeat them here because I wish to base this book, as far as possible, on my own experiences. In September 1948 I was acquitted by the de-nazification tribunal and Court of Appeal in Stuttgart. The political authorities reversed this judgment and instigated a new hearing. The verdict then reached was afterwards shown by the government of Würtemberg to contain as many as six breaches of law, amongst them the fact that owing to the Court's lack of competence I was wrongfully arrested in Würtemberg. This verdict too was quashed for political reasons. These proceedings exposed the government to extremely unpleasant public discussions, which led to an offer whereby all proceedings against me would be dropped if I agreed to forgo compensation for wrongful arrest. On my lawyer's advice I agreed to this compromise.

An ironic comedy was to follow this tragedy. Some time later the President of the Government of Stuttgart came to see me, to enlist my co-operation in some project or other. I referred to the impropriety with which my case had been treated in Stuttgart. Came the reply 'But why did you keep to your promise not to seek compensation? After all, the government's procedure was pure extortion. Every Court would have upheld your point of view.'

Yes, money really is quite an uncanny thing. Several times in my public life I was brought face to face with its uncanny quality. Because I was able to master it, I earned myself the title of magician or wizard. Of course, this only happened because to this day many of my measures have remained incomprehensible to a large number of people. Often it takes a long time for the sense and import of an act to become apparent. And yet everything was perfectly simple and straightforward.

The first time I was called in to master a difficult monetary problem was when the German Mark had been so devalued by the inflation following the First World War and the French invasion of the Ruhr that an American Dollar was equivalent to 4 billion German Reichsmarks. Expressed in figures this reads: \$1 = DM 4,000,000,000,000. The problem was to create a currency with which the small man could once again operate. This was the time when someone who asked why a German discount house in Berlin was building another two stories, received the answer that they were necessary to accommodate the bank clerks who would have to write the extra noughts. 'I thought that in discount houses the noughts had their offices on the first floor,' was Carl Fürstenberg's mocking rejoinder.

The next monetary absurdity confronted me with the problem of how Germany was to pay the reparations with which it had been saddled after the First World War. These payments had to be made in foreign currency. Quite apart from the fact that the German Mark was worthless, the victors had no use for Deutschmarks in their economies. They wanted to be paid in their own currencies. But where was Germany to find these foreign currencies?

A third problem arose out of the fact that after the First World War Germany had borrowed 20 milliards of Marks in loans raised abroad, intending to use the loaned money to bring its economy back to a viable condition. The loans and the interest on them had to be repaid. Not only had the necessary funds to be raised in Germany, but once again foreign currency was needed before payment could be made. The outstanding credits and loans were expressed in Dollars, Francs and Pounds Sterling, and had to be repaid with interest in the same currencies.

Another time I was faced with the problem of how to help a German economy which was completely impoverished and left far behind in foreign trade back onto its feet. The world economic crisis at the beginning of the 'thirties had reduced world trade to a third of its former level. Markets contracted and deprived many countries including Germany of their export opportunities. Industry stagnated, leading to massive unemployment. Social misery and communist agitation grew into a real threat. How could this situation be relieved?

Germany's re-entry into world trade was the next problem in the solution of which my experience in monetary policy had to be

brought into play. How could a Germany bereft of capital and cut off from foreign currencies once again obtain the raw materials required for the resurgence of its industries? Germany's own mineral resources are inadequate. To meet the needs of its people for agricultural products and of its industry for raw materials, imports are essential. Germany must seek to pay for these imports out of the proceeds from the sale of its industrial products. And where were the means necessary to create these proceeds to come from:

And finally there was the need to develop the country's means of production and investment so that the empty workshops, the idle machines and the willing labour could once again be made productive. Stocks of commodities had dwindled, capital savings had been consumed in the crisis years. New capital and new means of production had to be brought into existence.

In the following pages I will endeavour to show how all these economic and financial problems were solved. So far as possible I will illustrate my thesis with examples drawn from my own experience; theoretical discussions will be eschewed. In 1927 the German Publishing Institute in Stuttgart asked me to write a history of the stabilisation of the Mark in 1924. After submitting the manuscript, I received a letter from the publisher in which he told me that he had with some apprehension expected a dry, unreadable book, and was now overjoyed to find that the book treated its subject in a manner which enabled the reader to grasp the most difficult problems by referring them to his everyday experience. I will try to use this method in this book too. It is not a text-book but a book of experiences. For the best school is not in the class-room, but in life itself.

But the fact that it deals with an interesting chapter in economic history is not the only justification for this book. For it will be shown that the problems which were encountered in the period between 1920 and 1940 are not unique phenomena. They recur from time to time in this or similar form. Thus at the end of the Second World War financial problems were once again in the forefront of the world economy. The international credit system

which before the two world wars functioned well-nigh ideally in facilitating world trade, opening up new markets and financing new means of production and transport, has until this day not been fully restored to its former condition. A whole series of poor countries are anxious to participate in world trade and clamour for development aid.

Whereas before the world wars the gold standard regulated international payments without any difficulty, today there are a whole series of organisations like the World Bank, with its daughter associations, the International Monetary Fund and others, which seek to adjust the value of the various currencies to each other, and to regulate their reaction upon one another. Once again, as after the First World War, every conceivable theory which might lead to a solution of the problems of our economy is being tried. Yet perhaps it is possible to discern a few things in the history of the war and inter-war years which lead away from theories and into practice. It always bears repeating that the politics of currency and money is not an exact science, but applied art. Naturally, every art has its own handicraft. So too dealing with money, as in banking, is a handicraft the rules of which must be mastered. But the correct assessment of economic processes, and last but not least, the strength of character to resist tempting pathways and interventions by political force, are also part and parcel of monetary and currency policy.

One of the enticing pathways of monetary policy is to make use of credits while frivolously and irresponsibly leaving out of consideration all thoughts of repayment. It is tempting to spend the money obtained through credits immediately, and to leave the worries of repayment to one's successors. Each debtor must examine his accounts before raising credit. However, only too often political desires stand in the way of such self-examination. To guard against such eventualities the politician responsible for monetary and currency policies needs strength of character which frequently put his office as well as his person to the test. In the ensuing I will have a few things to say on this theme.

The banking system has a long history. The expansion of world trade which took place towards the end of the Middle Ages necessitated a professional organisation which would regulate the transmission of payment from place to place and country to country. The banking system developed in conjunction with the goods trade. The cradle of our modern banking technique is to be found in the towns of Northern Italy. It was here that the problem of an inter-local and international payment system, by means of bills of exchange and letters of credit, was first posed and solved.

The use of capital to grant loans began at an even earlier date. In the Middle Ages professional money lenders were almost always Jewish. Their concentration into ghettos, and the dictate which forbade Christians to charge interest, more or less compelled Jews to become money dealers and money lenders. Although at the beginning it was tainted with the odium of usury, the credit business proved just as useful and necessary for the development of the economy as the interlocal transmission of payment. Without the transmission of payments by banks to countries everywhere, our modern world economy and our all-embracing world trade would be unthinkable. And without a system whereby credit can be granted to producers, our modern economy could not have come into existence.

Many banking families achieved not only riches but also great public honours. A reminder of Florence as a trade and banking centre is the Florin, a gold coin minted in Florence and accepted all over the world. The name has remained in use until today. The Medici, a Florentine banking family, experienced a meteoric rise to fame and fortune. Towards the middle of the fifteenth century a Medici achieved supreme rule over all Florence, and under his successors the culture of the Renaissance reached its peak. The Medicis used their riches magnanimously to further the arts and culture. They became Counts and finally Dukes of Tuscany. Catherine of Medici was the mother of the French King, Charles IX, and during the religious wars in France, she was, before her son's coming of age, Regent for many years. In the seventeenth century Philippine, the daughter of Welser, proprietor of a large banking and merchant house in Augsburg, became the wife of the Austrian Archduke Ferdinand II. They founded the well-known collection of art and armour which is housed in Schloss Ambras near Innsbruck.

Many Jewish banking families also achieved fame and fortune. The names of Rothschild and Mendelssohn are only the best known amongst them. They, too, have their place in the politics of culture. When on the occasion of a visit to Paris I was introduced to a Baron 'Eschtall' and asked about the spelling of the name, it turned out to be Eichtal. He was a relation of the Bavarian Court factor, Seligmann, who lived in the first half of the nineteenth century. Not only was Seligmann elevated to the nobility, but he also succeeded in marrying all his six daughters into the Bavarian aristocracy.

The transmission of payment and the granting of credit have an important common pre-condition. They rest on faith in the word of and the ability to pay off the other parties to a transaction. Credit-worthiness and integrity occupy a central role in the business of banking. The banker must acquire exact information about the character, financial resources and diligence of his clients. He enjoys a relationship to his clients similar to that between doctor and patient. This was also the relationship of Court factor to Prince.

Every relationship involving trust requires comprehensive legal security. Contracts must be honoured. Justified claims and obligations must be fulfilled. The banking system cannot operate without the legal security of suitable laws resting on the recognition of private ownership. The banking system will always remain one of the mainstays of private ownership and of contractual obligations.

The legal interpretation of what constitutes a banking transaction is sufficiently broad to make provision for the fact that a verbal agreement between bankers is just as binding as a written contract. Share transactions on the stock exchange are today still carried out by word of mouth. The simple words 'to you' and 'from you' suffice to effect the transfer of securities from one owner to another. Only once in my whole banking career did a bank – a joint stock bank too – fail to honour a verbal undertaking on the pretext that it had not been confirmed in writing. All business connections with this bank, which – though this is no excuse – was experiencing some difficulty in maintaining its liquidity, were severed immediately.

Since every loan contains an obligation over a shorter or longer period, all banks are greatly concerned lest the value of money should not remain constant during the period of the loan. This concern is essentially of a moral nature. In book-keeping terms banks, like insurance companies, are little if at all affected by inflationary depreciations in the value of money. Their liabilities are expressed in the same currency as their assets. They owe Marks and possess Marks. Inflationary falls in the value of the Mark affect both sides of the balance sheet equally. Nonetheless, it is very much in the interest of the banks that their clients should not suffer as a result of falls in the value of money.

In trade a credit must tide the manufacturer over the time between the receipt of an order for a commodity and the receipt of payment for it after it has been manufactured and delivered. The value of the money which is due when the loan is repaid must be the same as it was at the time when the loan was granted. The constancy in the value of money is particularly important in foreign trade, which must thus be carried on not only under the same legal conditions, but also under conditions in which the need for stable values is acknowledged. For this reason the essay on currency in the standard work on political economy, the encyclopedia of political science, starts with the sentence 'The decisive question is whether or not price stability is and remains secure from the money side'.

It is one of the tasks of a bank to protect its clientele against the consequences of exchange-rate fluctuations in the international

payments traffic by accepting any loss resulting from this cause. This is done by balancing their clients' payment claims and obligations one against the other so that they become due at the same time.

In the course of the historical development of the economy the credit demands by customers reached proportions far in excess of the financial resources of individual banking concerns. This was especially the case in all business transactions where credit was sought not by individual concerns, but by larger corporate bodies. In feudal times it was the territorial overlords who needed credit on a large scale. Road building and other provisions for traffic required great capital outlays, even in peacetime. But it was especially preparations for and campaigns of war which required more money than was readily available. Here the solution was to raise loans the repayment of which was spread over a great many years.

As a result of this development the banker ceased to be a money lender with his own capital and became a money dealer, money transmitter and money lender handling the capital of others, who helped his customers to obtain money from third persons. The retinue of nearly all the larger Ducal courts included a so-called Court factor, whose duty it was to raise money for the Court and the State. In time these factors became permanent advisers and managers in matters concerning money. They did much of value, but at times their advice led to taxes which were hard on the underdog. Not a few amongst them earned the hatred of the populace.

The princes made every endeavour to retain the services of their Court factors, and, in addition to making profits by way of interest and commission, they were protected from persecution, and often also rewarded with external honours, such as elevation to the nobility, permission to own land and similar privileges. The procuration of money by means of large loans led to the sub-division of the amount of the loan into smaller segments which were then sold to the general public. This method of raising money involved considerable risks because the borrower demanded a firm undertaking that he would be granted the loan, but the banker could not sell the segments

until after the loan had been granted. This led to the formation of consortiums which undertook the acceptance of loans, and thereby spread the risks over a number of banking firms. This method was facilitated by making the loan segments (bonds) negotiable, so that the individual purchaser of such bonds could resell them at any time. This negotiability provided the impetus for the creation of the stock exchanges.

In addition to the demand for credit by public bodies, the development of the modern economy led to a massive need for credit in production and trade, a need which could no longer be met by the private banking firms. The formation of consortiums soon proved to be an inadequate answer to the great increase in private industrial credit. This led to the development of other forms of industrial enterprise, such as joint-stock banks, limited companies, and savings banks, which existed side-by-side with the private individual banking concerns.

While in the private banks the natural tendency was for the son to succeed the father in the management of the business, today's banks as public companies draw a large proportion of their managerial forces from amongst persons who come from outside, and who reach high positions through merit, not through family connections. The larger companies become, the more directors and managers are needed, so that a family on its own can no longer provide all the executives. The banking profession has thus become a profession which is open to everyone. With the development of the large banking institutions a certain degree of bureaucratic administration has become unavoidable. Nonetheless, the individual talent of a unique personality can still make its mark on a large concern.

I do not come from a family of bankers. Grandfather Schacht was a doctor, and my mother's father was a chief of police in Schleswig. In both families high value was placed on an interest in science and on service to the public. A wealth of knowledge and a high degree of culture were regarded as life's noblest aims. There is, however, amongst my antecedents a man whose career was strongly connected with matters of finance, money and currency. My mother's grandfather, Christian Ulrich Detley, Freiherr von Eggers,

was a politician who was also one of the most significant economic and financial experts of his time. Born in Schleswig-Holstein the family originally stems from Hamburg - he entered the service of the state of Denmark, to which Schleswig-Holstein belonged at that time. At the same time as carrying out his duties for the state he lectured in Copenhagen University and was a member or superior of the state's colleges for higher education in commerce and finance. He brought about the abolition of the trading monopoly in Iceland and granted the citizens of Iceland freedom of trade. He was the most active and effective assistant to the minister. Andreas Bernstoff. who achieved the abolition of serfdom in Holstein. He was curator of the University of Kiel. He advised the Imperial Austrian government on financial policies, a service for which he was awarded the hereditary title of Reichsfreiherr (Baron). He knew Goethe, and was friendly with Wieland. He was one of the leaders of the enlightenment in Germany.

The life of this man has been a preoccupation of mine since my youth. When I think of him now in my old age two episodes in his life strike me as particularly significant. In 1798 Eggers represented the Danish government at the Rastatt Congress at which the German Princes forfeited all German possessions on the left bank of the Rhine. Although a Danish civil servant, he could trace his German descent back for centuries, and was extremely perturbed by the lack of dignity, the servility and the loss of self-esteem exhibited by the Germans at Rastatt.

The second episode in his life has a curious connection with myself. As a result of the Napoleonic wars and the English military and economic blockade, the Danish economy was brought nearly to a standstill, with its monetary system totally in ruins. Then in 1812 the Danish government introduced a currency reform whereby they created a money, the security for which was formed by the entire landed property of Denmark. Eggers protested in the strongest terms against this measure. Since he died in the following year he did not experience his vindication. In fact he was shown to be right when it proved necessary to resort to the mortgaging of property, resulting in a far-reaching transformation of the economic

conditions and the state of property ownership of Denmark. The Eggers family was amongst those who lost their fortunes. I was compelled to think of these events and experiences when, as Commissioner for National Currency and President of the Reichsbank, I did everything to take the Rentenmark, which was similarly based on landed property, out of circulation as quickly as possible.

Despite my interest in the life of Christian Ulrich Detlev Eggers, my admiration for him did not lead to my deciding to become a banker or financier. In 1895 I matriculated at the 'Johanneum' Grammar school in Hamburg, having completed my high school studies in nine years, moving up a class each year. Arithmetic, mathematics and physics meant little to me, while I found German literature, languages and history fascinating. Because my older brother was a student of medicine, I too began to study medicine at the University of Kiel. It took me only a few weeks to discover that I was completely unsuited for medicine. I took my leave, and went to visit my Danish relations called Eggers in Jutland, and my grandfather Schacht in Friedrichsstadt.

When in 1892 a great cholera epidemic had broken out in Hamburg I had spent a week with grandfather Schacht, and had come to know my family home in Ditmarschen. For hundreds of years my ancestors had been peasants in the marshes between the Elbe and Eider. Now I learnt about the factors which were part of my heritage and which had shaped my nature too. Ditmarschen had always been a land of free farmers. Serfdom and socage service had never existed there. No castles had ever been built between the mouths of the Elbe and the Eider. Even incorporation into Holstein and later into Denmark did nothing to alter this state of affairs. A Danish king had once said: 'Are Ditmarschers supposed to be peasants? They behave as if they were country squires.' Throughout all the vicissitudes of history this people retained its identity and asserted its unswerving inner determination. This inheritance is bound to have had its effect on me. A present given to me on my 60th birthday by my colleagues in the Reichsbank reminded me of Goethe's words:

No time, no power, can disintegrate an established form which is living and developing.

Of course, my flight from medicine was no solution. I had to decide to which subject I would devote my studies. A discovery which I made while I was with my grandfather provided me with an impetus. In his youth my grandfather, then an assistant in a pharmacy in Weselburen, had been friendly with Friedrich Hebbel, who was then secretary to the head of the local board. An exchange of letters which took place between them at this time came into my hands on rummaging around in my grandfather's loft, and directed my interest to Germanic philology. I devoted my next semester at the University to this field.

However, when, during my third semester, which I spent in Munich, I attended lectures by Lujo Brentano, the most famous economist of his time, I knew I had found the subject which interested me most. I began to study political economy. My interest in German philology was thereafter restricted to a study of journalistic techniques and newspapers, a branch of knowledge which had not then been formalised. I published a small paper on this subject and touched upon the political and economic significance of newspapers. Written in 1898 and entitled 'Statistical inquiry into the Press of Germany' it was the first study of its kind and appeared in Conrads Jahrbüchern für Nationalekönomie und Statistiks (Conrad's Yearbook for Economics and Statistics). This theme engaged so much of my attention that when I entered for my doctorate in my home town university of Kiel I suggested to the admirable Professor Hasbach that I should write my dissertation on the theme of the political and economic significance of newspapers. It would have been the first ever dissertation on newspapers - since then hundreds have appeared - but Hasbach rejected the idea with merciless irony. Instead I submitted a thesis on 'Theoretical aspects of English mercantilism' which, as I learnt many years later, achieved the grade of 'valde laudabile'. My doctorate as a whole did not reach this high standard, because I only just made the grade in philosophy, a compulsory subject.

During the two years after taking my degree, which I spent as syndic of a commercial association, I must somehow have drawn attention to myself. On the board of the association were businessmen, bankers and industrialists who counted amongst the greatest names of their time. Soon from amongst their numbers I received offers of posts, once as syndic of a chamber of commerce, another time as economic adviser to the Allgemeinen Elektrizitats Gesellschaft (General Electricity Co) and yet again from the Bank of Dresden.

Although I gained practice and proficiency in writing newspaper articles and in speaking at conventions during these apprentice years, I did not see my future in representing one-sided economic interests. I did, however, find stimulus and instruction in personal contact and collaboration with the leaders of the organisation. For a year I worked in close conjunction with Georg von Siemens, Director of the Deutsche Bank. In addition I came into personal contact with many other leading figures in the German industrial scene of the time. I did not wish to associate myself with any special group, but sought more general activity in the field of economics. It seemed to me that I would most probably find the right opening in a large bank. Out of the many alternatives open to me, I decided to accept the offer from the Bank of Dresden.

The negotiations with the management of the bank preceding my engagement took an amusing course. I was asked how much I was earning at present. My reply that the figure was DM 8,000 per annum dumbfounded everyone. 'But,' I was told, 'our chief clerks, all older men, are paid only DM 6,000 a year. Surely you will see that we cannot pay a young new entrant like you (I was 25 years old) more?' My answer solved the problem. 'No matter, I shall work for you for DM 6,000 per annum. I am sure that in a year's time you will not hesitate to pay me more.' My proposal was accepted, and a year later my prophecy came to pass. The above figures may not seem much in our inflationary times, but in those days 8,000 gold Marks per annum was a considerable income for a 25-year-old.

Thus I became a banker. After trials and errors in medicine, after a love affair with German philology, and after preparatory studies in economics I made my career in banking. I have not lived to regret it. Every profession has its manual or spiritual working tools. When I entered the service of the Bank of Dresden I did indeed have the customary theoretical knowledge gleaned in the course of my studies in political economy, but I had no idea of the practical techniques of banking. However, the Bank of Dresden did not ask me to be a banker. What they expected of me was something else – today it is called 'public relations'. My endeavours were aimed in quite a different direction: I was looking for the meaning and essence of monetary policy.

The Bank of Dresden's public relations were not very good. It had been hard put to defend its standing during the banking crisis of 1901. The collapse of the Bank of Leipzig, a Saxonian institution, attracted attention and some criticism to the Bank of Dresden, which was also of Saxonian origin. The bank was founded in Dresden in 1872, but had long had its head offices in Berlin with branches in many other German towns. After the experiences of 1901 the bank sought to establish better relations with the public.

The only section of the press which had hitherto been favoured as a vehicle for publicity consisted of the many small journals which chided and begged their way around the Berlin stock exchange and contributed to meaningless stock exchange gossip. They were fedwith advertisements, particularly with commissions to reprint prospectuses giving details of new issues of shares or bonds. The larger newspapers also welcomed these prospectuses, and a critical mention in such a paper was of much greater value. But contact even with larger papers was restricted largely to the insertion of advertisements. Regular and informative contact with the financial editors of the larger newspapers, taken for granted today, was well nigh non-existent at that time. I myself have throughout my career had close contacts with newspapers, particularly with the Frankfurter Zeitung. As bank director and later as president of the Reichsbank I frequently discussed economic and financial problems in all confidence with Albert Oeser, editor of the financial section of this paper. I was often able to give him information on condition that it must not be published before a certain date. He never let me down.

At the time when I entered the service of the Bank of Dresden, the

financial editor of the Berliner Morgenpost, which belonged to the publishing house of Ullstein, was particularly ill-disposed towards the bank, and often made unjustified comments on its dealings. My management asked me if there was anything I could do to alter this state of affairs. I did not deliberate for long. Naturally I did not wish to appear as a suppliant or complainant, and therefore sought another point of departure for my negotiations. Without a moment's hesitation, I withdrew from the Morgenpost the advertisements which were inserted in the other papers. The result was a lively protest by the publishers addressed to my management. They, however, gave me a free hand, and I now went to see the eldest of the five Ullstein brothers. He objected that one should keep the editorial and the advertisement sections separate. I answered this objection with the following parable:

'You advertise on all hoardings in Berlin with the slogan "Read the BerlinerMorgenpost". Would you still do so if under every poster advertising your paper there was another one which read "The Morgenpost is Berlin's worst newspaper"? You can hardly expect the Bank of Dresden to recommend a new issue in your advertisement section if this new issue is represented as inferior in the editorial section.'

Ullsteins could not deny such simple logic. My efforts were successful. This little story highlights one of the most portentous problems of the newspaper industry, because it exhibits the conflict between advertising and editorial policy. I do not wish to imply that Ullsteins gave way for financial reasons. My logic would surely have had some influence on them. No one has ever had any cause to object to factual and reasoned criticism, provided it is free from caprice and malevolence. Confidence and credit, these are the mainstays of the monetary system. They must not be wantonly or negligently jeopardised. And to permit criticism to depend on financial interests is naturally even worse.

I soon came to realise that I would never comprehend the meaning and essence of the banking business unless I learned to master its working tools. The management of accounts, the discounting of bills of exchange, the calculation of interest, the determination of

exchange rates, arbitrage in foreign bills and securities, the giro system, the handling of cheques, the administration of securities, the floating of new issues – I felt I had to get to know all this and much else at first hand. Therefore, I asked the management for permission to work my way through all the departments of the bank as if I were an apprentice. Permission was granted, on condition that I would use my free time, that is before and after bank opening hours and the lunch hour, to perform my existing duties, and provided that these duties would not suffer as a result of my other activities.

Naturally by now there was more to my publicity duties than merely remaining in touch with the press. All banks – and thus the Bank of Dresden too – had archives. Stored here, and always kept up to date, were balance sheets, reports, newspaper cuttings etc relating to the general economic situation and to companies and other enterprises at home and abroad about which a banker had to keep himself informed, because they either were or could become his clients. Since keeping such archives is a purely mechanical operation, the employees entrusted with this task were not particularly well educated. Nonetheless, the evaluation of such material requires understanding and initiative. Hitherto the Bank of Dresden could not spare such qualities for this task.

The mechanical task of assembling the archives was in the hands of an elderly gentleman, who certainly had no great knowledge of economics, but who was most conscientious. He saw his task as the peak of intellectual activity, and let no one impugn the importance and significance of his position. Because I did nothing to rob this orderly and characteristically decent man of his office or his dignity, we were on very good terms.

Yet I was not content with a purely mechanical collecting of items of information which served only for occasional reference. I sought to extract something from these archives which would be usable as publicity for the bank, as well as provide valuable material for instructing the bank's powers-that-be in the salient facts of economic life. As a student in Paris I had seen a model in the offices of Credit Lyonnais of which I now made use. Once a week, and even daily

when necessary, I compiled a bulletin for the directors and departmental managers dealing with and commenting upon the most important economic events of the day. Very soon the distribution of this bulletin was extended to the bank's clients, and, by including a monthly survey on the economic situation with all the bank's outgoing letters, my bulletin also reached those whose custom the bank was seeking to obtain. Today, every client is showered with such bulletins by his bank: then, it was something new which was soon imitated.

Now I was entrusted with an additional task which stimulated my energies, and gave me so much pleasure that I did not relinquish it during the entire time I spent with the Bank of Dresden. If one wished to introduce shares or bonds onto the capital market, it was essential to obtain an appropriate quotation on the stock exchange. Because it makes the purchase and resale of securities possible at any time at a rate officially fixed by the stock exchange, such a quotation is indispensable to the success of a placing.

By law, admission to official dealing on the stock exchange was dependent on the approval of a stock exchange committee which had the task of ascertaining whether the issue of securities concerned was sound and worthy of confidence. The most respected members of the stock exchange sat on this committee, and one of their number acted as assessor for each application. The examination was made on the basis of a prospectus which contained all the necessary details of the concern or public corporation which wished to avail itself of the stock exchange's capital market. The submission of such a prospectus was usually carried out by the bank which undertook the financing of the concern or public corporation. The task of preparing the prospectus was therefore undertaken by the bank, To this end it obtained all the details necessary to make an assessment from the concern seeking finance, and incorporated these details in the prospectus. This necessitated extremely involved conferences. negotiations, discussions and critical reviews with those concerned in the new issue.

This task was entrusted to me, and it gave me the opportunity to become closely acquainted with the internal organisation of innumerable concerns and public corporations, both at home and abroad. My ability to judge credit-worthiness made great progress as a result. I had a hand in the preparation of every prospectus which was produced during my thirteen years with the Bank of Dresden. Not only was it necessary to compile the prospectus, it also had to be represented and vouched for during the examination by the assessor. My activities in this field soon led to smaller banking firms asking me for advice and help in the preparation of their prospectuses, and to my being co-opted as member of the stock exchange new issues committee.

Despite this growth in my activities I had time on my hands. I therefore made use of the permission granted me, and for a whole year went through all the departments of the bank as a crash course apprentice. I performed my duties in the field of political economy in the morning, lunchtime and outside banking hours. In that year my family did not see much of me. Nor can I say that I became a fully-fledged banker as a result of this crash course, but I did learn everything which forms part of banking activity. From here on no one could pull the wool over my eyes, and I knew how and where money and credit problems had to be tackled.

Amongst the most amusing and perhaps also the most instructive experiences of my apprenticeship were visits to the stock exchange. My attitude towards this institution was naïve in the extreme. Day in and day out the most important theme of conversation amongst the employees of the bank was the stock exchange prices. It was not difficult to form the impression that this theme lay at the heart of the banking system. I began my encounter with the stock exchange in great awe. The first superficial impression was also extremely favourable. The Berlin stock exchange was an imposing building. During the noon hours hundreds of commodity and security dealers gathered in its three large halls. On busy days they crowded, loud and gesticulating, round the enclosures in the centre of the halls, behind which the accredited brokers calculated the quotations according to supply and demand.

When business was slack, the time was passed with jokes and gossip. And it was customary to pull a new arrival's leg, or to play some practical joke on him. Thus, for instance, a label with some silly inscription was fastened to the back of his suit. I, too, was not spared this tomfoolery. When, on one of my first days, I stood in the crush in front of the enclosures, I suddenly felt a slight tickling on the back of my neck. Like lightning I turned round, grasped one of the men behind me by the chin, and shook his head. The general laughter proved to me that I had caught the right person. After that I found that the stock exchange people accepted me as one of them.

The stock exchange is a much-needed market where the money necessary for day-to-day business requirements is distributed, and where the long-term financing of business enterprises is made possible and promoted by the traffic in shares, bonds and other securities. A less attractive side of the stock exchange is that it fosters speculations not always motivated by rational considerations, and often seduces the inexperienced into permitting themselves to be influenced into fanciful or unthought-out paths.

It was thanks to my apprentice year that I was immediately afterwards accepted for duties on the regular practical side of banking. The department devoted to economic affairs, however, remained under my control. At the age of thirty-two I was promoted to branch management, and this appointment greatly increased my insight into the German economy, since I then had to make frequent visits to other bank branches, each with its own problems.

Confidence in one's business partner plays a decisive role both in transmitting payment from place to place, and in the mutual interaction between the parties to a large-scale credit arrangement. In the Middle Ages the transport of effective moneys was extremely difficult, not only for technical reasons, but also on grounds of security. For this reason a system of surety by letter of credit came into being. A banker in one town gave a client who needed money in another town a letter to a banker in that town who, when the letter was presented, gave the client the required money and charged it to the letter-writer's account. The same thing happened in the opposite direction, and the balance was settled on a suitable occasion. Such a money and credit arrangement was possible only if the two bankers could trust each other. Thus from the very beginning of the modern banking system a close network of relationships and friendships between many private firms was essential. The Rothschild family, its five brothers each resident in one of Europe's business centres, provides a good example.

It is true that with the rise of banks as public companies such personal business friendships lost some of their significance; but human relationships are still extremely valuable. In the case of the joint stock banks it is of course no longer personal influence which forms the basis of confidence. International law however remains as significant as ever. The legal protection afforded by British preponderancy in world trade was, before the two world wars, an important factor contributing to the frictionless functioning of the international payments traffic.

The payment of savings and cash receipts into a bank requires a great deal of confidence, a confidence which is engendered by the fact that the joint stock banks are endowed with large capital funds of their own. Here personal relations play hardly any role. But in the granting of credit, the negotiation of loans, and similar transactions, personal factors still have a part to play. In the spring of 1916 I left the Bank of Dresden and joined the board of the Nationalbank für Deutschland (National Bank of Germany). Soon afterwards an industrial tycoon, whom I had got to know as a client of the Bank of Dresden, came to me to do business. I asked him why he had not taken his custom to the Bank of Dresden, and received the reply that he had in the course of previous dealings with the Bank of Dresden kept an eye on me, and that as a result he had confidence in me. The leaders of large industrial undertakings and the leaders of the big banks also on intimate terms, have full confidence in each other. Their relationships extend over a wide field, and have been developed through constant contact over the years and decades.

Already in my apprentice years, when I was engaged as economic syndic in an association representing the commercial interests of German industry, I had the good fortune to meet many of the personalities prominent in the German economy. My most valuable relationship was that with Georg von Siemens, manager of the Deutsche Bank, with whom I was in daily working contact for a whole year. Georg von Siemens had become a banker without ever having served a banker's apprenticeship. He too was no banking technician. He once remarked that to start with he had not known what the most commonly used stock exchange phrases 'letter' (offer) and 'money' (demand) meant. Siemens was a practical political economist of the first rank, who had grasped the significance of the banking system in the development of the economy. It was he more than anyone who was responsible for the close co-operation between the banks and industry. The recognition that his task lay in this field prompted him to accept a Reichstag seat. In the Reichstag he executed measures of an economic nature which often set the trend of German economic policy. By developing

its branches and deposit accounts, the Deutsche Bank made such a success of encouraging people to bank their savings with them, that it could use a proportion of these savings to finance long-term credits. Siemens applied the principle of life insurance to banking: just as all people do not die at once, so too all bank deposits are not likely to be encashed at once. This principle can lead to abuse, as Siemens discovered when the Bank of Leipzig came to grief. But he had courage, and his bank was already strong enough to withstand this first great shock to the modern German banking system without the intervention of the Reichsbank, the note-issuing bank.

In the trade association for which I worked I became acquainted with many industrialists as well as with bankers; in the Bank of Dresden I got to know many more famous names. Amongst them was Rathenau, the founder of the 'Allgemeinen Elektrizitäts Gesellschaft', Privy Councillor Duisberg, who amalgamated the three largest German chemical companies into the so-called I G, Adolf Woermann, the Hamburg shipowner, Karl Friedrich von Siemens, the chairman of the Siemens concern, Roesicke, the land owner, whose brother was general manager of a large Berlin brewery, and, last but not least, the two Ruhr giants, Hugo Stinnes and August Thyssen, who, together with the Bank of Dresden, founded the 'Saar Und Mosel Bergwerkgesellschaft'.

Connected with this event is a small anecdote to which I was witness. The 'Saar and Mosel' was founded with a share capital of DM 21 million, of which Thyssen and Stinnes took up 10 million Marks each, with 1 million DM as the Bank of Dresden's share. The function of the bank was to act as a kind of referee should differences arise between the two largest shareholders. After signing the contract founding this concern, Thyssen turned to Stinnes:

'Well, Stinnes, now we must obviously pay in the share capital. I have a suggestion to make: I shall issue bills to the value of 10 million Marks which you will accept, and which the Bank of Dresden will discount.'

'But Thyssen,' said Stinnes, 'never in my life have I signed an accommodation bill' (later on he was no longer subject to such scruples).

'In that case I will make another suggestion,' Thyssen replied, 'you issue bills for 10 million which I will accept.'

And this actually happened. The bills were promptly discounted by the Bank of Dresden.

Much as I like making and fostering business friendships, I have always disliked party political ties. My upbringing and education inclined me to a democratic liberal outlook on public affairs. But I took no pleasure in party political activities. It is nonetheless true that for a few years in my youth I had party political connections, spoke at public meetings and participated in public discussions. When, in the elections of January 1919, after Germany's defeat in the First World War, there was the danger that the Social Democrats would gain a parliamentary majority, I collaborated in the founding of the German Democratic party and made speeches on its behalf. I found satisfaction in the fact that despite defeat in war and the unrest which accompanied it in many parts of Germany, many left-inclined voters supported not the Social Democrats, but our party, which represented the views of the middle-class left. These voters, too, had doubts about giving the hide-bound socialists a Reichstag majority. The party gained seventy Reichstag seats and held the balance of power. After the election I very quickly withdrew from the party, and from political activity. The clique system, and the strong ascendancy of personal ambition, spoilt my appetite for active collaboration. The leaders of the party took only fourteen years to reduce its number of seats from 70 to 5.

In assisting in founding the party I never sought a seat for myself. Already, by the time I was twenty-six, I had refused an offer of a safe seat. And when in the 'twenties Stresemann's party asked me to be a candidate, I declined. My striving was for positive action in the general interest in the field of political economy. I considered my activity as a banker to be more conducive to this end than party politics in parliament. In 1948, having at last escaped political persecution, I once more had to decline offers from three popular parties which sought my services as a candidate.

It was not long before I had the opportunity to add foreign con-

nections to those I had forged at home. In the summer of 1905 our manager Schuster took a business trip to the United States, and asked me if I would like to accompany him as secretary. I was very glad to accept his invitation. Even on the ship I made new acquaintances. Naturally they were not all business people. Amongst the passengers were one Italian and two German tenors journeying to America for public engagements. The Italian was Caruso, already world famous: a charming, rather reticent companion, who participated unassumingly in our games on board.

In New York the business connections of the Bank of Dresden took us to Morgan & Co, then one of the foremost finance houses, where the two of us established our headquarters. Here I became acquainted with a large number of American bankers and bank managers. None of them made a greater impression on me than the head of the house, the old John Pierpoint Morgan, who regularly invited Schuster and me to take lunch with him. For a whole week I was able to participate in the discussions which were dominated by Morgan's superb intellect. In those days the firm still occupied the old low corner building in Wall Street which has now been replaced by a modern skyscraper. The executive office, situated on the ground floor, was separated from the remaining offices by shoulder-high glass walls. There was no question of a solemn announcement of visitors, no question of waiting rooms and ante chambers. Everyone had access to the chief's desk, provided only that he was free; the glass screens permitted everyone to see if this was the case. Relations between chief and employees were friendly and informal without respect suffering.

When in 1924 I made my first visit to Mussolini in Rome, I had occasion to recollect the simplicity of J. P. Morgan, in his time the most important of America's banking chiefs. Before meeting Mussolini, I was first led into a waiting room. Two minutes later someone arrived who took me to another waiting room. After a further two minutes I was taken to yet a third waiting room. Then at last I was permitted to enter the room in which the head of the Italian state was at work. It was an unusually large room with its entrance in one corner and the large writing table behind which

Mussolini reigned some twenty or thirty steps away in the far corner of the room. J. P. Morgan was able to do without such artificial aids to his standing and dignity.

I doubt if anyone who sat round Morgan's table at that time is still alive today. I last saw Morgan's son Jack in 1930 in The Hague, where he was staying as a member of the Young committee. Thomas Lamont, a most imposing figure, I last saw in 1933 in Heidelberg, where we discussed the question of annuity payments on the Dawes-Young loan. Charming though he was, Morgan's son Jack, with whom I collaborated for four months during the Young conference in Paris in the spring of 1929, did not approach his father's intellectual heights. One of old Morgan's utterances has always remained fresh in my mind. I once asked him to what he ascribed the fabulous rise of his house. He replied, 'To the fact that I always believed in the economic future of my country.'

On my first free Sunday in New York I made a journey to the Niagara Falls, which were then regarded as one of the world's greatest natural wonders. Lack of time prevented me from visiting the even more interesting American West. Not until later, when I went to visit the founder of the Bank of America, the Italian Giannini, in San Francisco, did I get to know this part of the world. In the course of this first journey to America I also made a short business trip to Toronto. A brief stay in Washington became an important event, because I was able to accompany Schuster on a visit to the President, Theodore Roosevelt.

Is it not strange how certain events in life are inter-linked? Shortly after seeing the Niagara Falls, I was concerned with a project for the utilisation of the much more impressive Victoria Falls in southern Africa, and 28 years after visiting Teddy I sat opposite his nephew Franklin Delano Roosevelt, as representative of the German government. (I represented the German interests at the London world economic conference.)

The African project provided for the utilisation of the Victoria Falls by means of a gigantic electric power station on the Witwatersrand. A company had been formed in England with the aim of utilising the enormous water power potential of the Zambesi. The AEG in Berlin was asked to investigate the project. It found that the construction of a generating plant at the Victoria Falls with cable lines to transport electric power to the mining districts of Johannesburg would prove unprofitable. On the other hand, the exploitation of the vast coalfield on the Witwatersrand by means of a coal-fired electric generating plant promised to be economically successful. The company founded in England under the name of the 'Victoria Falls Power Company' therefore entered into a contract with the AEG for the erection of a power station utilising the Witwatersrand coal. The company retained its attractive-sounding name as a lure for future shareholders. The capital required to build the power station was raised in Germany by means of a loan floated by the Bank of Dresden. Part of this loan was used to pay the AEG for its work. The company prospered and is still in existence, operating on a much larger and highly profitable scale, while vast quantities of water continue to cascade down into the depths below the Victoria Falls, unharnessed as ever.

The contacts which I made in New York and London also stood me in good stead at a later date in my public life. My connections in Paris (I had spent one term there during my student days, including some time in the economic section of the Credit Lyonnais, where as an insignificant student I did not get to meet the chief) were not very strong, and it was only much later that I came to know France's leading bankers.

My experience of banking was now far-reaching and illuminating. The technical process of dealing with money is not the crucial factor in banking, it is merely a tool. It is the background which is crucial. With money the Bank of Dresden built railways in Brazil, power stations in South Africa; it financed municipalities and states both at home and abroad. With money it equipped industries and commercial undertakings. Each year it invested hundreds of millions of Marks, and thus sums greatly in excess of its own share capital. Where did this money come from:

In the beginning bankers lent and invested only their own money. The extent of their business found its limit in their own resources. With today's joint stock banks things are different. They attract money deposits from the public and employ these deposits in their business. The majority of these deposits are on current account, and can be withdrawn at a moment's notice, a portion are lodged with the bank on the longer term. The bank must therefore take care to employ the money deposited with it in such a way that it is always in a position to make repayment of deposits whenever they become due. The responsibility of a bank does not therefore stop at ensuring that its deposits are kept secure, but also includes making sure that the due date of its own loans and investments corresponds with the date on which deposits are due to be recalled. Availability of capital deposits, or liquidity, is of the greatest importance for the banking system. Short term deposits must be lent or invested only in the short term. A bank knows from experience that not all deposits will be encashed at the same time, a fact which allows it a certain leeway. Essential for a bank's liquidity is that it should be able to fall back on the central bank. The most liquid and most remunerative investment available to a bank is the commercial bill, which is as a rule repayable in a period not exceeding three months, while its security and negotiability is assured by special laws. The main business of the note-issuing bank is to purchase such bills when the banks need money, so that the banks possessing the appropriate number of bills can always obtain money from the central bank.

Next to liquidity, the crucial question is that of security of the capital deposits. Bills which the bank accepts must be good; credits given by the bank must be safe; investments made by the bank must be profitable. The customer's liquidity is a precondition of the bank's liquidity. Only when these conditions are satisfied will the central bank be in a position to help, should a bank run into liquidity- or payments-difficulties because of changes in business activity or wrong decisions. In my time with the Reichsbank I experienced cases of wrong decisions which underlined drastically the truth of these words.

When in the spring of 1925 I returned from the holiday which I had permitted myself after the Mark had finally been stabilised,

I had a visit from the heir to the great Hugo Stinnes concern, the founder of which had died the previous year. Young Stinnes showed me his books, which indicated a great fortune, but also a large indebtedness. Stinnes confessed to me that he was obliged to settle bills of exchange to the value of ninety million Marks drawn on London within fourteen days, and that he did not have the means to do so. The bills were expressed in Pounds Sterling. This confession not only astonished me, but it also gave me cause for great concern. I had only just managed to stabilise the Reichsmark and succeeded in amassing a reasonable fund of gold and foreign exchange, a stock which would be sadiy depleted by a withdrawal of ninety million Marks. Yet I could hardly leave the firm with payment difficulties. Moreover, the doubts about the stability of the Reichsmark could well have been rewakened by a default. For me, as president of the Reichsbank, this latter point was decisive.

'If,' I said, 'the only way to maintain your property intact was to get so deeply into debt, then it was absolutely necessary for you to realise some of your assets, and to bring about a condition of liquidity which would have enabled you to avoid getting yourself into the embarrassing position in which you now find yourself. It was moreover most improper of you to have incurred so large an indebtedness in a foreign currency. To pay out ninety million Marks in Pounds Sterling today – a year after the stabilisation – is not a trivial matter, not even for the Reichsbank.'

But I had to swallow the bitter pill. I called a meeting of the big banks, and prevailed upon them to grant Stinnes a credit of ninety million Marks, while the Reichsbank would make the ninety million available in Pounds Sterling when they fell due in London. At the same time I left it to the banks to collaborate with Stinnes in the sale of some of his assets, so that the concern might regain its liquidity. The only good which came out of this affair was that the esteem accorded to Reichsbank and the German currency in the City of London was greatly augmented.

The control of the Stinnes crisis was accomplished without attracting a great deal of public attention, so that unfavourable psychological reactions were avoided. This also happened in another

case which was cleared up without causing a public scandal. In 1929 the FAVAG (Frankfurt General Assurance Company) got itself into financial difficulties. It had raised considerable amounts of credit on the London capital market, and had been unable to honour its debts as a result of unsuccessful speculations. On a visit to London I had a conversation with Baron Schroeder, the head of the German-English banking house, in the course of which we had the following amusing and instructive dialogue:

'Well, Mr Schacht, I rely on you as president of the Reichsbank to see to it that at all events I do not lose any money with FAVAG and that I get my loans repaid.'

I affected great surprise and replied coolly:

'But, Baron, up to now I was always under the impression that assurance companies do not borrow money, but on the contrary lend it. I cannot understand on what grounds you lent money to FAVAG. And perhaps you will permit me to ask how much interest and commission you are charging on these loans?'

'Including commission, I reckon on between eight and nine per cent.'

'And what percentage would you have earned had you loaned the money in England?'

'About four per cent.'

'Then, Baron, I trust you will deduct the five per cent overpaid in interest on the loan from the amount outstanding, and declare yourself satisfied with a correspondingly lower repayment.'

Fortunately, the FAVAG case was resolved without evil consequences because the German Allianz Versicherungs AG (Alliance Insurance Co) took over FAVAG with all its assets and liabilities. I have mentioned this incident here because it provides a typical example of the fact that in granting a loan the responsibility is not always entirely that of the borrower, a great deal of responsibility is also with the lender.

I frequently harked back to this fact in the years between 1924 and 1930 when American and other foreign bankers and banks granted Germany countless loans without properly investigating and

evaluating the possibilities of repayment. The reason for granting these credits was not so much the endeavour to help the German economy to its feet after its defeat in war – it is well known that there is nothing cosy about money matters – but rather the profitable business of placing German loan issues on the American market. The error made in granting excessive credit lay in the fact that the loans were not always used to further the economy, but sometimes to defray the cost of outlays which had no direct productive result. Besides reparations, such outlays included particularly the amounts spent on public building, social institutions and similar works.

A further error lay in the fact that interest on and repayment of the loans was due not in German Marks, but in Dollars or other foreign currencies. This would have been possible only if Germany could have obtained the necessary surplus of foreign exchange through industrial exports, which was not the case. In constantly repeated public exhortations I warned both the German borrowers and the foreign lenders against the dangers of this course, always without avail. That did not prevent my being inundated with reproaches, and being blamed for Germany's inability to pay, when disaster in due course occurred. A just verdict on these foreign loans would show that the responsibility of the lenders was at least as great if not greater than that of the borrowers.

Strangely enough, the criticisms and reproaches levelled at me came less from abroad than from political circles at home, which would have fared far better had they heeded my warnings. In particular, Social Democratic parliamentarians who had previously spurned my warnings took an active part in these criticisms. This rejection of my advice largely contributed to my resigning from my post as president of the Reichsbank in 1930. These cases of erroneous granting of credit show that lenders too can be wrong. Both parties failed to evaluate the situation properly.

There is even less excuse for a widespread abuse which took place in the spring of 1927. The cautionary example of the consequences of excessive foreign indebtedness did not prevent the German banks from continuing to employ short-term foreign loans in their business. Not only was this bad management on the part of the individual banks, but the overseas indebtedness was also a burden on the Reichsbank's stock of foreign exchange, because it was payable in foreign currency. Stinnes and FAVAG did not have sufficient means to settle their debts when they fell due, irrespective of whether payment was due in German or in foreign currency. Had these debts been incurred in German currency, the Reichsbank would not have had the least difficulty in coming to the rescue, because in both cases it was not a matter of being unable to pay, but merely one of lack of liquidity. Because these debts were incurred in a foreign currency the federal bank's reserve of foreign currency was depleted. The exchange rate of the Mark was in its turn strongly influenced by, if not dependent on, the care and preservation of this reserve. Perhaps the prompt settlement of the Stinnes foreign debt even served to reinforce the banks in their assumption that they could at any time obtain sufficient foreign currency from the Reichsbank. Be that as it may, the banks without the slightest hesitation continued to raise loans abroad and to use the resulting funds for their current transactions.

Consequently, I had confidential talks with a number of bank directors to ascertain what quantities of short-term moneys they had borrowed from banking associates abroad. My inquiries revealed so considerable a sum that I was impelled to give a most dire warning, particularly since a large portion of these foreign loans was being used to grant credits to customers for the stocks and shares dealt in by the banks, who in their turn used these credits for stock exchange speculation. While I could manage to summon up some degree of comprehension for the desire of the banks to help German industry by means of loans financed with short-term moneys raised abroad, I simply failed to understand why the proceeds of foreign loans should be made available for speculative purchases of securities on the stock exchange. It struck me as monstrous that stock exchange speculation should be kindled and stoked by means of foreign loans at the expense of the Reichsbank's reserves of foreign currency. After I had repeatedly exhorted a large number of bank directors to put an end to this mischief, the Reichsbank instructed the banks to ensure that their customers' purchasing

orders should be secured by a corresponding cash deposit, and that purchases made purely on credit should be disallowed. On one occasion the Reichsbank even went so far as to exclude from its clearing house activity one of the big banks which had not obeyed the Reichsbank's instructions – a move which brought it to its senses within a few days.

However, since such individual measures did not have the desired effect, the central bank in May 1927 insisted that the banks instigate a drastic restriction of credit to customers for securities. The Reichsbank had to retain control over its reserves of foreign currency and gold, and could not leave them at the mercy of the lack of comprehension and the egoistic business interests of the banks. This regulative measure led to a major fall in stock exchange prices on 13 May, 1927, a day which was henceforth to be known as 'Black Friday' in the annals of the Berlin stock exchange. Fortunately this brought about a considerable reduction in speculation, and contributed to the fact that the crash on the New York stock exchange, which took place two years later, had a less severe effect on the German stock market than it would have, had speculation been given free rein. Another factor which contributed to lessening the crisis was that some of the big banks were impelled by the Reichsbank's intervention to reach an agreement with their foreign loan-granting banking friends, whereby a portion of the shortterm credits were consolidated for a number of years.

In my discussions with the bank directors I always pointed out that Germany was by no means in a position to honour its great obligations under the Dawes plan on its own. At every opportunity I tried to bring home to the banks, and also to the government, that the payments which had to be made to foreign countries under the Dawes plan were not, as the Dawes plan expected and required, effected out of export surpluses, but solely and entirely out of a portion of the foreign loans which flowed into Germany, particularly from America. Between the wars Germany had rarely achieved any export surpluses, and then only very small ones. I therefore always fought for the greatest possible reduction in the loans raised abroad, because I placed the responsibilities of Germany as a borrower

just as high as the responsibilities of the foreign issuing banks as lenders.

Within two years of the coming into force of the Dawes plan, Germany had already taken up long-term loans from abroad to the value of 3½ billion Marks. Insofar as these foreign moneys served to further the efficiency of German industry, enabling it to earn foreign exchange through exports, earnings which would then be used to pay interest on and repay the loans, all was well. But these foreign loans became grave in their consequences if their equivalent value was used for local political purposes by the state, provincial, or local government. Such use did not create the means to pay interest on and repay the loan. Here, as so often both before and since, politics made the error of leaving social and economic consequences out of account. The battle for votes impelled all parties without exception, but especially those of the left, to let as much foreign money as possible into the country, in order to create cultural and social comforts for the people. How nonsensical were the conceptions about these things which prevailed in certain provincial governments can be seen from the fact that towards the end of 1924 one German state planned in all seriousness to raise a foreign loan amounting to 100 Reichsmark per head of population. Had the rest of the Reich followed suit, this would have added up to an amount of six billion Reichsmark.

After this incident the Reich Ministry of Finance convened an advisory committee for foreign credits. It began its operations in January 1925, and for a number of months succeeded in slowing down the rate at which foreign loans were raised. However, this committee did not have all the authority which the Reichsbank would have liked it to have. While in New York in the autumn of 1925 I had the opportunity of alerting the American authorities to the dangers of granting too much credit to Germany. My efforts came to grief because the American bankers had an insatiable appetite for business, and continued to offer German borrowers new loans.

When at the end of 1929 the New York stock exchange crash put an end to the granting of loans, Germany had, within six years, borrowed some 20 billion Marks from abroad. This was exactly as much as the United States of America had used in its development over the previous forty years. Even if the bankers did not see it, the American public became aware that great danger was inherent in the loans granted to Germany. The failure of the Young loan at the end of 1930 provided striking proof of this fact. It was not long before Germany had to declare itself unable to pay the annual interest on foreign loans. Despite the Hoover Moratorium of June 1931, the German bank crash came in July 1931.

In recent times there have once again been some business failures for which not only the borrowers, but also the lenders, are to blame. I refer to the case of Schlieker in Hamburg, and the case of Krages in Bremen. It is beyond dispute that Schlieker undertook to construct a wharf which was in every respect the most modern of its kind, and which also promised to be profitable. Schlieker was on the right road, both from the technical and from the organisational point of view, but he lacked financial wisdom. In taking delivery of his materials he incurred considerable credits with large industrial firms, amongst them a nationalised undertaking. The suppliers should have investigated and taken cognisance of the amount and period of credit which would be required before the wharf was completed. This obligation lay just as heavily upon them as on Mr Schlieker. Both failed in their responsibilities. The creditors then withdrew their credit in the middle of the constructional work, thus bringing about the downfall of the enterprise.

While in the case of Schlieker we are dealing with a capable industrial entrepreneur, Krages was a stock exchange speculator who certainly does not deserve our sympathies. He raised loans from countless banks, and used them solely for large speculative stock exchange transactions. There was no question here of any social or political ends, merely the striving for personal gain and personal influence. If one admits there is no excuse for Krages, one must also wonder why so many banks acceded to Krages's request for credit, although it was generally known how the money would be used, and although it was easy to ascertain the total extent of his indebtedness.

The behaviour of the banking authorities in the case of Krages remains inexplicable. From the bank reports which reached them each month, the supervisory authority knew the volume of outstanding credits, and thus had the opportunity, not to say the responsibility, to draw attention to the Krages operations.

The bank supervisory authority owes its existence to a law which I instigated when I was Minister of Economic Affairs in 1934. National Socialist agitators led by Gottfried Feder had carried on a vicious campaign against private banking and against our entire currency system. Nationalisation of banks, abolition of bondage to interest payments, and introduction of state Giro 'Feder' money, these were the high-sounding phrases of a pressure group which aimed at the overthrow of our money and banking system. To keep this nonsense in check the president of the Reichsbank called a bankers' council which made suggestions for tighter supervision and control over the banks. These suggestions were codified in the law of 1934, which was strengthened in 1957 by increasing the powers of the bank supervisory authority.

In the course of several discussions, I succeeded in dissuading Hitler from putting into practice the most foolish and dangerous of the ideas on banking and currency harboured by his party colleagues. Adolf Weber, the recently deceased doyen of German high school teachers of economics, confirmed this in a statement made to the Ludwigsburg de-nazification tribunal. His deposition is the more remarkable because he was not asked by me to testify in my favour, but was called by my accusers to give evidence against me. The reason for this was probably the fact that Weber had once published a short lecture in which he attacked me on the question of our foreign debts. My accusers, who had not troubled to acquaint themselves with the full facts, were bitterly disappointed. Weber recalled that even by the end of March, 1933, Hitler had explained to the Reichstag 'In principle, the German government will safeguard the interests of the German people, not by means of a state-organised bureaucracy, but by means of the greatest possible furtherance of private enterprise and respect for private property'. Adolf Weber commented that 'parts of this and some other utterances sometimes recall almost word for word the "fundamentals of German economic policy" which Schacht had promulgated a year previously'.

It is not without a certain irony that at a later date an attempt was made to apply to me the very bank supervisory law which was passed at my instance. I had lost my entire fortune as a consequence of the Second World War, and the judicial persecution perpetrated against me by Hitler, international military tribunals and German de-nazification Courts, prevented me from doing anything to preserve my savings. When I was at last freed from political persecution, I was therefore forced to look for a way of earning my living.

What then was left to me after my return from Indonesia - where I was for a time active in an advisory capacity - except to revert to my profession as banker? In 1952 I asked the Social Democratic Finance Senator Dudek in my home town of Hamburg whether I could count on being permitted to work for a banking firm. With great warmth Senator Dudek answered this question in the affirmative. However, when I then applied to the Socialist government for permission to open a banking business, my application was turned down, despite Mr Dudek's assent. I was compelled to take legal action against the Senate, which justified its refusal by alleging that my business morality was found wanting. It referred in this context to the financial methods which I had used to reinvigorate the German economy when in 1934 I was re-appointed president of the Reichsbank. I shall come back to this method, here I will only say that it consisted in the discounting by the Reichsbank of bills which granted industry credit over a term of five years. The Reich itself guaranteed repayment.

I won the case against the Senate in both the first and second hearings. My colleagues on the board of the Reichsbank and I were always of the opinion that the Reichsbank had an obligation to cater for and consider all aspects of economic life. All members were imbued with this responsibility, and I look back with satisfaction on the fact that in all the time I was president of the Reichsbank every decision by the board was reached unanimously.

Managing a bank is not a mechanical activity which can be exercised according to fixed rules and regulations. It demands a feeling of responsibility for the economic health of the commonwealth. It requires a capacity for making decisions, and courage. It necessitates unusual insight into unusual situations, and, where necessary, unusual measures.

Even in those days the Bank of Dresden and all the other big banks had amongst their clients a large number of trading firms engaged in import and export. Such clients needed credit for the purchase of foreign raw materials and foodstuffs, as well as for the sale of producer and consumer goods. These requirements are usually met by banks partly through their own foreign branches or agents, and partly through banks with which they have friendly arrangements. In this respect Germany was, and still is, far behind the other industrial countries. Although with the growth in German foreign trade the Mark has grown in significance as an international means of payment, the German banks have been very tardy in developing a network of foreign branches. For many decades Great Britain occupied the top position in the international banking world. It had the oldest tradition in international trade. The Pound Sterling was the most acceptable, most versatile trading currency. In the course of time France and the United States of America began to challenge Britain's preponderance. Today the American Dollar has outpaced the Pound as an international means of payment.

If we examine the great banking houses of America, England, and France, we find that the Bank of America has it own establishments and agencies in more than twenty-five foreign countries. Barclays Bank of London operates in more than forty countries and has some 1400 foreign branches, while the Credit Lyonnais also has branches and agencies in more than forty countries.

Before the war only two of Germany's big banks had branches abroad. The Deutsche Bank maintained its own branches in London

and Constantinople, while the Bank of Dresden had a branch in London. In 1886 the Deutsche Bank founded the Deutsche Überseebank (German Overseas Bank) as a subsidiary, with establishments in Spain and South America. In 1906 the Bank of Dresden followed suit by founding the German-South American Bank, which also had establishments in South America. Soon after, the Bank of Dresden, in conjunction with a number of other banks, founded the Deutsche Orientbank with establishments in the Near East. The German-Asiatic Bank was founded jointly by all the major German banks in 1889. But that was all.

All these overseas banks, except the Deutsche Orientbank, survived both world wars. Where the foreign establishments were situated on the territory of the victors they were, it is true, expropriated, but they nonetheless continued to operate. One can note with satisfaction that the endeavour to found overseas establishments has recently come to life once again, invigorated by the fact that German exports have gained an unexpected momentum in the last few years.

After the First World War, a French group was interested in taking over the Orientbank. The negotiations were difficult, because the French demanded that the 'dossier secret' be handed over. When asked what they meant by this dossier, it emerged that they meant the document which contained certain instructions on how the bank made and executed its business. The trouble was that no such dossier existed.

The help of German banks overseas is a vital necessity for German export. Such assistance is not merely restricted to the transmission of payment and the granting of credit for purchases and deliveries; overseas banking establishments are also an excellent means of making propaganda and contacts for German exports, and of helping to maintain and expand them. Foreign banks give the home industry impetus and assistance by supplying a steady stream of economic data, by providing information on clients and on the entire economic climate, and also by maintaining contacts with foreign governments and other authorities. In addition they open up new avenues for the home capital market by acting as mediators in industrial

investment, in granting loans to industrial and other installations and in catering for the general financial needs of credit-worthy countries. In almost all cases such investments and loans result in orders for the home industry.

Before the war the foreign banking system contributed considerably to bringing foreign loans to the German capital market, and to the development of enterprises in foreign countries. Naturally Germany could not match its older industrial neighbours in this respect, yet at the beginning of the First World War German foreign investment totalled nearly 30 billion Gold Marks. Germany did a great deal to catch up in the forty years of peace between 1871 and 1914. German enterprise was possessed by an unprecedented urge for activity. Industry and science co-operated intensively to make all technical advances available to the economy at large. A people of poets and thinkers had become a people of explorers and inventors.

Perhaps it is due to my studies of economics that although my talents lay in the world of business, I was always fascinated by the connections between science and business, and their significance for the development of the national economy. At any rate, already while I was with the Bank of Dresden, I felt the need to express my ideas on this theme. In 1913, on its fortieth anniversary, the Bank published a brochure which I had written depicting not only the rise of my bank, but also the entire economic progress of Germany as a whole. This essay under the title 'Germany's Economic Resources' traced the features of the last forty years, in the course of which a continental, still mainly agrarian, Germany had developed into an industrial and commercial state, whose tentacles were spreading over the entire world.

The association between science and economics found its most fruitful expression in the institution of the Kaiser Wilhelm Society for the Promotion of the Sciences which, with support from industry, systematically intensified and extended scientific research. The Kaiser Wilhelm Society was founded under the special patronage of the Kaiser in 1911. After the collapse of 1945 it changed its name to the Max Planck Society. I have been a member of both societies

since 1926. But, however deserving the name Max Planck, it is nonetheless regrettable that the society, which owes its founding and much else to Kaiser Wilhelm, should have turned its back on its origins and traditions. When, 25 years after its founding, the society celebrated its jubilee, I, as Minister of Economic Affairs, was asked to give an address. My speech contained the following sentence: 'When future ages come to sum up the cultural history of the age of Wilhelm II, they will perhaps call this time the age of applied science'. Max Planck was then chairman of the society, and shortly afterwards he wrote to me 'Above all you have always shown a deep understanding for this special relationship between science and the economy which is reflected so clearly in the traditions and organisation of our society from its foundation to the present day'.

Essential for the geographical extension of the German economy was the rapid capital formation which enabled Germany to reach out beyond its own frontiers and to participate in the economic development of other countries and continents. The reaction of the foreign press to my essay 'Germany's Economic Resources' was not always friendly. The rise of a newcomer always rouses envy and fear in his competitors. The booklet showed clearly how within two decades the European situation had been transformed. Germany had become a great power politically and economically. The consequence was that England emerged from the 'splendid isolation' of Victorian times and formed a network of alliances and agreements directed against Germany. France and Russia armed themselves, financed by French money. It was now Germany which was driven into an 'isolation' which was everything but 'splendid'.

The sum amounting to a billion Marks or more, which Germany received annually in revenue from its foreign assets, was an extra which was needed to prevent a deficit in Germany's balance of payments. With cyclical variations in the level of foreign trade it was not always possible to settle this balance through exporting industrial products. Thus the income from foreign investments served as a welcome reserve and equalisation fund. The two world wars have proved tremendous setbacks to Germany in this respect

too. Germany's foreign assets today have not quite reached ten per cent of the level existing before the First World War. Since the only way Germany can pay for the raw materials essential to its industries and for foodstuffs sufficient to feed its populace, is through the proceeds from its exports, and since export is never certain without investment and installation abroad, the replenishment of Germany's foreign assets is the most pressing task of German trading policies. It must always be borne in mind when considering how monetary savings are to be employed.

Foreign assets and overseas loans play a not inconsiderable part in politics. He who lends money gains an influence over the economy of the borrower, and the economy forms a substantial part of politics in general. The fact that the Deutsche Bank undertook the financing of the Turkish Baghdad railway at the turn of the century was a thorn in England's side, and increased her envy. Today the close connection between money and foreign policies becomes especially clear in the so-called development aid for the underdeveloped countries. However great their need for help, such countries do their best to eliminate the lender's political influence on their development. They regard every kind of economic tutelage as politically suspect and undesirable.

In the years between the Dawes and the Young plan I experienced a noteworthy example of the inter-connection between the monetary economy and foreign politics. I represented Germany on both committees, and had to familiarise myself in detail with the claims made by Germany's opponents. Amongst these claims was one by Belgium. It had not been forgotten that during the period in the First World War when Belgium was under German occupation, a large number of German Marks had flowed into Belgium, and had remained there when the war ended. The Belgian government had exchanged German Marks offered to it by the citizenry against Belgian currency, and now demanded that Germany should exchange these Marks for Belgian or other foreign currency. The Dawes committee did not concern itself with this question, because the Belgian claim fell outside its brief. Nor was the Young committee

prepared to tackle the matter. The Belgian representative in the Dawes committee, M. Franqui, General Manager of the Société Générale de Belgique, the largest Belgian bank, who feared for the success of Belgium's claim, suggested a compromise. In the course of a conversation, he mentioned the possibility that - provided Germany exchanged the Mark notes - Belgium might be prepared to restore to Germany the territory of Eupen-Malmedy, insofar as it was German speaking. I had further discussions on this theme with the Belgian Minister, Delacroix. The greater part of the Belgian press showed itself in favour of the plan, especially the conservative Catholic Bien Publique, and the Christian-Democrat Standard, and also the Radical-Liberal Dernière Heure and the Socialist Peuple. The affair was discussed in a most lively manner not only in the Belgian, but also in the French and English press, and it was reported that the foreign minister, Vanderfelde, agreed with the stabilisation minister, Franqui, about the merits of the plan. On 21 July, 1926, I received a letter from Mr Delacroix in which he informed me that the project had been approved:

'The following notice informs you in what terms M Franqui reported to his colleagues on the conversation which he had with you. The project has been sanctioned.'

Of especial interest to Franqui was the fact that a large payment of foreign currency by Germany would help the exchange rate of the Belgian Franc. But at this point there were many diplomatic to-ings and fro-ings, in which the energetic opposition of the French President, Poincaré, and also of the Belgian military lobby, was brought to bear on the Belgian government. It gave in and the negotiations failed.

On the occasion of the Young conference in the spring of 1929 the problem arose once more. The Social-Democrat Reichs Chancellor Hermann Müller instructed me to negotiate on the newly re-opened Mark question with the Belgian Minister Franqui, who was now my colleague on the Young committee. My instructions for the negotiations were to indicate that while Germany wished to settle the Belgian Mark matter, it could do so only in return for a corresponding concession on the part of Belgium. For the form which

this concession should take I was to refer to the carlier negotiations. If Belgian prestige should demand it, the exchange of the German-speaking parts of Eupen-Malmedy could be regarded as a re-purchase of German state ownership in the territory in question. Franqui was only too well aware that the previous negotiations had foundered on the rock of Poincaré's opposition, and in addition Belgium's foreign exchange position had changed for the better. Once again the negotiations failed on grounds of political prestige.

The acquisition of territories in exchange for money is, of course, nothing new or special in history. In 1803 the United States of America bought the whole Mississippi region now known as Louisiana, which had until then belonged to France, and in 1867 Alaska was purchased from Russia. A later example of the connection between money and foreign policy concerned me personally to a much greater degree than the Belgian-German failure. It is well known that after Hitler's take-over in Austria a large number of Jews from Vienna and Budapest managed to escape persecution by obtaining permission to emigrate in return for payments to the party. They bought their political freedom with substantial amounts of foreign exchange.

After the shameful events of November 1938 which culminated in the destruction of the Jewish synagogues, I publicly declared my repugnance at these acts of terrorism. In the course of an address on the occasion of a pre-Christmas celebration by the employees of the Reichsbank at which many party leaders were present I said 'The razing of Jewish synagogues, the destruction and pilfering of Jewish shops and the maltreatment of Jewish citizens was such an outrageous exploit that it must make every decent German blush for shame. I hope that not one of you has taken part in these misdeeds. If any one of you was involved, then I advise him to leave the Reichsbank as quickly as possible. We have no room in the Reichsbank for people who do not respect the life, the property and the convictions of others. The Reichsbank was built up on faith and good will'.

My attitude makes it plain that I had the strongest desire to find a solution to the Jewish question which Hitler would find acceptable.

I put it to him that the terrorist treatment meted out to the Jews was a political error, and that he ought to use other means if he would be rid of the German Jews. I pointed out to him that the Reichsbank had estimated the value of Jewish property in Germany at around six billion Reichsmark. I suggested that this Jewish property should be administered by an international trust committee, and that on the basis of the security of this property at its valuation of 6 billion, a dollar loan amounting to some 1\frac{1}{2} billion Reichsmark should be raised. Jews all over the world would be invited to subscribe to this loan. I thought that the taking up of such a 11/3 billion loan should not prove too difficult for the many well-to-do Jews living abroad. Out of the Dollar proceeds of this loan the trust committee would give each German Jew who intended to emigrate a suitable amount which would enable him to make a new life for himself in another country. This would not only serve the interests of the emigrating Jews, but also those of countries which hesitated to grant entry to penniless Jews. The German Government would guarantee payment of interest in Dollars, and undertake to repay the loan within 20 years.

Astonishingly enough Hitler agreed to this suggestion, and authorised me to negotiate with my London friends in order to ascertain whether such a plan were feasible. Accordingly, early in 1939 I went to London, and first of all put the plan to Montagu Norman, governor of the Bank of England. He approved of my proposals, and arranged for me to discuss them with one of London's most prominent Jews, Lord Bearstead, the chief of the well-known firm of Samuel & Samuel. He signified his agreement to the plan, but remarked that he would have to discuss it with the spiritual leader of the London Jews, Chaim Weizmann. Two days later he returned to tell me that unfortunately he could not accept my proposal, because Weizmann had been vehemently opposed to the plan. No reason was given. I had to resign myself to the fact that my attempt to give the German Jews their personal and political freedom through a financial transaction had failed, although it was not even a question of a forced sale, but merely one of an interestbearing loan which would be repaid, and which would also leave the

Jews with their German property intact. I have never understood why my plan was rejected. The fact that Hitler agreed to it shows that at that time, at the end of 1938, he was still prepared to reach a compromise. Whether the Jews of the world would have been in a position to save their German brethren from the fate which later overtook them will always remain a debatable point amongst people of good will everywhere. The monstrous idea of the 'Final Solution' obviously came to fruition only at a later date. Even if at that time there was no suggestion of such a thing, the desire of many Jews to leave Germany was understandable. The refusal of the leading Jews to entertain my suggestion led to much discussion and dispute in Jewish circles too.

The incredible misdeeds, cruelties and injustices of the past have now made many people conscience-stricken. One result is the well-nigh hysterical fervour with which everyone is today striving to do his utmost for those countries and people who have hitherto enjoyed but few of the creature comforts which are available to those who live in the highly-developed industrial countries. It is urged upon us that every undeveloped country must be put on an industrial basis as rapidly as possible. Yet such industrialisation not only presents a monumental task of education and training, it also requires a vast amount of capital. How vast can be appreciated by considering that some two-thirds of all mankind live in the underdeveloped countries. This huge demand for capital must, if the wishes of the philanthropic are to be met, be supplied by that remaining third of the world which has lost and squandered a large part of its savings in the course of two cataclysmic world wars. All the savings in the world are insufficient to satisfy each one of these idealistic pipe dreams, and only out of savings can economic development be financed. Yet unfortunately the aid-granting fervour has caused the banks to invoke their power to create money in order to remedy the shortage of capital. The need to reconstruct and make up for the losses of the war years already demands an enormous amount of capital in the countries directly concerned. If one adds the needs of the developing countries to this amount,

one can easily see how important it is to bring capital needs into a certain relationship with new capital savings. Instead we are permitting ourselves to be carried on the crest of a wave which, because of the continuous devaluation of money, will certainly reach a point at which all development comes to an end. The resulting economic crisis would then compel us to begin again at the bottom.

The years between 1920 and 1924, which even today are still known as the 'period of inflation', are amongst the most difficult ever experienced by the German economy in peacetime. For all who still remember it, the fall in the value of money at this time meant reductions in property values, impoverishment of the upper and lower-middle classes, corruption in the government and the civil service, undernourishment, and the rise of doubtful personalities to sudden riches. This and much else is summed up by the word inflation. By the end of the war the Mark was worth about half as much as before its outbreak. A gold Mark (the standard by which the paper currency is measured) was worth two paper Marks. But by November 1923 a gold Mark was worth a billion paper Marks. Written out in full the figure is: 1,000,000,000,000. Within five years the German Reichsmark had sunk to one fivehundredmillionth of its value. To make such comparisons is to play with numbers. But what faced the individual bread-winner trying to maintain his family was no game, but direst need.

Other languages have no equivalent for the word 'Währung'. They call it 'monnaie' or 'currency' and thus 'coin' or 'circulation medium'. The German word expresses most succinctly the real significance of the means of payment: it must 'last' (währen—to last) and it must have stability, i.e. it must maintain its value.

Before state-guaranteed paper money was invented, commodities which had value in their own right were used for money. The Latin word 'pecunia' is derived from 'pecus' a head of cattle, and dates from the time when the herds were the means of exchange which

enabled one to purchase a wife and other goods. Most widely used as mediums of exchange were the metals gold, silver and copper. Gold was the most favoured of them and it has retained its rank as the best means of payment for thousands of years.

Before the war, bank-notes owed their value principally to the fact that the state or the note-issuing bank undertook on demand to exchange the paper money tokens issued by them for gold. Today this is no longer possible. All the gold in the world would not suffice to effect the exchange of paper money for gold coin. Even in former times it would not have sufficed had all owners of bank-notes presented them for exchange into gold. But such a possibility never had to be allowed for. The bank note was accepted, because everyone had confidence in the state's ability to pay. Internationally the gold standard was maintained by the fact that the Bank of England was prepared not only to buy gold at a fixed price, but also to sell it at this fixed price at any time. Even if later on other central banks for their part undertook similar obligations, it was still the world-wide trust in the Bank of England which gave paper money the same status as gold coin.

This trust was so great and so much a matter of course that noone ever gave a moment's thought to the fact that the gold standard,
which the whole world adopted in the course of the last quarter
of the 19th century, was not a currency standard which carried any
international obligations. Each country, even if its central bank
was under obligation to exchange paper for gold, had only a
national currency i.e. one restricted by law to its own country.
The obligation to exchange paper for gold was not of decisive
importance for the internal circulation of a currency. At home the
crucial fact was that money had been given the character of 'legal
tender'. This signifies that by law all financial obligations contracted
within one's own country, be they to private individuals or to
public corporations can be settled by means of the paper notes and
coins of the realm which constitute the country's currency.

This legal provision proved completely fatal to the German currency after the First World War. Due to the continuous and progressive devaluation of the Mark every long-term debt meant

heavy losses for the creditor. Anyone who in 1918 raised a loan over five years and used it to buy land or other durable goods, or anyone who had long-standing debts, was able on the due date in 1923 to repay the nominal amount borrowed with a Mark worth only a fraction of the value of the goods bought with the borrowed money. The borrower obtained durable goods for his money, but the lender only received worthless paper Marks. Anyone with debts grew rich.

Other countries did not escape inflation. But Germany was hardest hit, and in Germany in particular it affected the mass of the people. As in all business and money matters, the educated classes notice and grasp the implications of changes in money value more rapidly than the uninformed man in the street. Anyone who recognised the inflation in time could safeguard himself against paper money losses by buying, as rapidly as possible, any commodities which, like houses, landed property, manufactured goods and raw materials, would keep their value in contrast to paper money. The flight into material goods enabled not only the well-to-do but also, and more particularly, all the sharks, to preserve and increase their fortunes. Anyone in a position to incur debts grew rich.

The way these people pushed to grow rich by exploiting the ignorant majority led to a moral poisoning of every aspect of business life. All saving ceased. Anyone unable to find any durable material goods to buy spent all his money as rapidly as possible on all kinds of things giving immediate pleasure. The less money was worth, the quicker the pace of its devaluation. Great unrest and mounting embitterment afflicted the working classes, professions, the civil service, the office-workers and those living on fixed incomes, who often could not pay for the bare essentials.

Perhaps it will be asked why the workers accepted such devalued money. The answer is simple: because modern man can neither buy nor sell without money. In a natural or barter economy there is no need for money. The modern commercial and market economy with its highly-developed division of labour cannot effect the exchange of goods and services without a universally valid means of exchange and payment. It is not possible to pay for a tram

journey with a loaf of bread, or for a loaf of bread with a tram journey. Man needs money and cannot exist without it. The diabolic magic of money is here clearly visible. It has helped mankind to make immense strides in economic development, and has at the same time enslaved him. Regression to a moneyless condition, or the modern method of exchange by means of money – any kind of money, but still money – these are the alternatives. Money plays the rôle of the sorcerer's apprentice – created to serve a master who cannot now rid himself of his indispensible sprite. It is the master now.

Throughout history there have been periods of inflation. Only rarely can they be ascribed to circumstances which are beyond human cognition and control. Professor Gaettens, in his book 'Inflation', ascribes the collapse of the currency at the time of the Roman emperors to the fall in the price of copper, which caused a fall in the value of copper money. In the majority of cases, however, inflation comes about through mistaken financial policy, or even more frequently because the costs of wars and armaments exceeded income from taxes.

In the second half of 1923 numerous employers began to pay their workers in kind. This was an emergency measure full of loopholes and offering only a partial solution. Undertakings requiring working capital or capital for investment, issued bonds repayable not in money but in anthracite, Kilowatt hours of electricity, potash, cement and similar articles. This kind of bond entitled the creditor to a definite quantity of coal, electricity, etc. It kept its value in terms of a particular commodity, even if the value of money fell. The need to stabilise the currency grew more desperate with each passing day. The Reichsbank upon which this responsibility fell could not make up its mind to take action. It held the view that it was useless to attempt to stabilise the currency so long as the Ruhr was occupied and the war debts remained unfixed.

Privy Councillor von Grimm, a member of the directorate of the Reichsbank, explored this question in his speech to mark the fiftieth anniversary of the bank's foundation on 2 January, 1926. 'To an

ever growing extent the Reich had to resort to the Reichsbank if it was to prolong its existence, and because the point at issue was the survival of the Reich, the Reichsbank did not regard itself justified in refusing even after the passing in 1922 of the law which gave it formal autonomy.' The legislation of 1922, which was intended to free the Reichsbank from the claims of the state, came to grief at the decisive moment because the Reich could not find any way of holding its head above the water other than by the inflationary expedient of printing banknotes.

In 1922-23 a whole series of plans aimed at restoring stable money were published, and publicly discussed. I participated only to the extent of suggesting that a means of payment based on gold should be found, a form of money which would be usable only abroad, and which would provide the populace with an index of how far the value of the paper Mark had fallen since yesterday. I regarded the deception of the public over the value of the paper Mark to be particularly unjust socially.

One amongst the many plans suggested aroused special interest: it was promoted by a strong political group in the Reichstag consisting mainly of members with agrarian connections. Karl Helfferich formerly Liberal, now Conservative, wanted to institute a currency bank which would be administered by Germany's agricultural interests. In principle Helfferich availed himself of an idea which was already being applied in industry: loans were no longer drawn up in money but, as we have seen, in quantities of goods. The capital of the bank would consist of a five per cent first charge mortgage, half of which would be raised on agricultural and the other half on industrial and commercial property. The mortgage would take the form of annuity bonds and would constitute the security for the paper money to be issued. This would be payable according to the price of rye, and could be exchanged for a certain quantity of the cereal. The Reichsbank would remain in existence side-by-side with this proposed new currency bank; provision would be made for the new money to be exchanged into Reichsmarks at a later date.

There was rightly much opposition to this plan in industrial,

trading and banking circles, while agricultural interests promised themselves an increase in political influence. After much discussion the government promulgated a new plan for a Rentenmark which differed from Helfferich's concept principally in the following particulars:

- 1. Independence in managing the Rentenbank was restricted by a formal framework and the granting of credit was transferred to the Reichsbank which was empowered by the Rentenbank to borrow a corresponding amount in Renten banknotes.
- 2. The banknotes issued were based not on the fluctuating value and price of rye, but on gold.
- 3. Rentenmark money was not made legal tender nor was a fixed rate of exchange between the new money and the Reichsmark established.

This removed the worst deficiencies of the Helfferich project. The government's rejection of other suggestions which were directed at the immediate restoration of the gold standard, and its decision in favour of the modified Helfferich project, must be ascribed to internal party-political motives. From a point of view of currency theory, the Rentenmark was a misconception. Not even Helfferich could close his ears to the objections which were advanced. He had to admit that the new money was no use in effecting international payments, and that it could only constitute an emergency bridge to the gold standard. He also admitted that in addition to the Rentenmark a foreign bill or gold Mark would, as I had suggested, be needed in order to facilitate the transmission of foreign payments.

Helfferich's change of front brought him generally into line with my own thoughts on the matter. Soon after, when I became Commissioner for Currency and then President of the Reichsbank, I made every endeavour to take the Rentenmark out of circulation as quickly as possible and finally to abolish it altogether, at the same time bringing the Reichsmark back to full validity. To this end the Reichsbank gave the Rentenmark parity with the new Reichsmark. The Reichsbank exchanged every Rentenmark al pari into Reichsmark, or, in other words the Reichsbank guaranteed the Rentenmark exactly as it did the Reichsmark.

If the public believed that all the miseries of inflation could be

cured merely by inventing the Rentenmark, it was greatly mistaken. The invention of the Rentenmark did not stabilise the Mark; the battle for stabilisation continued for a year, passing through many a difficult phase.

One of the first problems arose over the abolition of emergency money. The origin of this emergency money resembles a satire which precedes the real tragedy of the inflation. It arose simply out of the fact that it was a technical impossibility to provide the multicoloured paper notes in quantities sufficient to effect all payment transactions. While before the war the presses of the Reichsbank had printed all banknotes, in 1923 133 additional printing firms with 1783 machines were needed to supply the demand. More than thirty paper manufacturers worked at full capacity solely to provide paper for the Reichsbank notes. Yet even with this immense output the Reichsbank was unable to deliver enough banknotes to statisfy the demand. It often had to ask the provinces, municipalities and individual large concerns to print and put into circulation their own emergency money. In such cases it gave an assurance that it would redeem these emergency notes exactly as if they were its own banknotes. By the end of 1922 the amount of emergency money in circulation already amounted to one tenth of the Reichsbank notes, and by the end of 1923 there was as much emergency money as Reichsbank money.

The result of issuing these emergency notes was that the Reichsbank lost control over the circulation of money and also stopped presiding over the credit system. If everyone could print his own money, equivalent in value to Reichsbank notes, then the Reichsbank had to relinquish its position as central bank in control of all currency and credit.

The first step towards the stabilisation of the Mark was therefore a decree issued by the Reichsbank on 17 November, 1923, whereby it would not accept any emergency money after 22 November. Holders of these notes were given four days in which to redeem the emergency money lying in the safe deposits of the Reichsbank.

The result was immense consternation amongst those who profited from the system of emergency money. I was assailed from

all sides by requests and pleas to withdraw the decree. Had I given in to this pressure the work of stabilisation which had just begun would have been in vain from the start. When I as currency commissioner had to attend the discussions of those emitting emergency money, I did not allow myself to be deflected from my purpose. The emergency money vanished. If my firmness did not make me popular with the industrialists and the municipalities, this was a cross I had to bear. Hugo Stinnes went so far as to inform the Reich Government that the businessmen of the Rhineland would decline to have any further dealings with me. It took well over a year before my opponents recognised that my measures were justified – by then the stabilisation of the Mark had succeeded.

There were several other occasions in the course of my activities in the field of currency policy on which business circles, particularly big business, were dissatisfied with or divided about my measures. Although my policies were always directed towards the furthering of the economy, at times they must have been uncomfortable and troublesome in their effects. This lost me much sympathy, and has not been forgotten even today. I have always appealed to the sense of responsibility of the captains of industry. Responsibility is the fundamental condition for the preservation of private property and of all private enterprise.

There was a second obstacle to the stabilisation of the Mark. On 20 November, 1923 the Reichsbank decided to maintain a rate of exchange of 4.2 billion Marks to the Dollar. This rate was chosen essentially for accounting reasons. The peace-time exchange rate had been 4.2 Marks to the Dollar. Thus it was now only necessary to remove the noughts from the 4.2 billion in order to achieve a simple conversion to the old gold Mark basis. By and large any other rate of exchange could have been chosen. The main thing was to fix the exchange rate.

The speculators, however, did not believe that the Reichsbank would be able to hold this rate of exchange rate for any length of time, and bought dollar after dollar on time bargains at a much higher rate of exchange. Towards the end of November the Dollar reached an exchange rate of 12 million Marks on the free market

of the Cologne bourse. This speculation was not only hostile to the country's economic interests, it was also stupid. In previous years such speculation had been carried on either with loans which the Reichsbank granted lavishly, or with emergency money which one printed oneself, and then exchanged for Reichsmarks.

Now, however, three things had happened. The emergency money had lost its value. It was no longer possible to exchange it for Reichsmarks. The loans formerly easily obtainable from the Reichsbank were no longer granted, and the Rentenmark could not be used abroad. For amongst the stipulations governing the issue of the Rentenmark, there was one which forbade the surrender of Rentenmarks to foreigners. For these reasons the speculators were unable to pay for the Dollars they had bought when payment became due. They were forced to sell the Dollars back, and the Reichsbank was not prepared to pay more than the official rate of 4.2 billion Marks to the Dollar. The speculators made considerable losses. A bare ten days later the rate of exchange of 4.2 billion fixed by the Reichsbank had re-established itself. That measure too was hardly designed to make me more popular. This was the first time that the Reichsbank brought hoarded foreign exchange back into its coffers. Four months later it was given another chance to achieve this end.

This first success had also a favourable effect on the internal payments situation. Whereas at first small traders had preferred to deal in Rentenmarks they soon grew accustomed to Reichsmarks. Already by December, trade accepted Rentenmarks and Reichsmarks on equal terms. Yet all this still did not add up to the ending of inflation. Everything had to be done to prevent any new inflation in the future. The fact that the Reich government was no longer allowed to raise credits with the central bank contributed to this and the success of this restriction was in large part due to the Reich Finance Minister, Luther, who showed himself just as resolute in the face of pressure as the Reichsbank.

Yet the greatest impediment to a final stabilisation of the Mark was the growth of industrial credit. Industry and trade were bled financially dry by the inflation. To set the economy in motion again required a great deal of help from outside, which the Reichsbank was asked to an ever greater degree to supply. It was difficult to deny these justified claims for credit. The lost war and the subsequent years of inflation had seriously retarded the progress of the German economy. Economic reconstruction demanded considerable new resources. But all available capital had been spent on war costs and reparations. Thus there was no alternative to making use of credit. And the only authority which could grant such credit was the Reichsbank. But the Reichsbank could not print banknotes to its heart's content and put them into circulation without engendering a new inflation.

A certain willingness on the part of the Reichsbank to meet those who clamoured for credit legitimately halfway had the unfortunate result that the Reichsmark fell below par on the foreign money markets. At the end of 1923 the Reichsbank and the Rentenbank had outstanding credits of some 609 millions, four weeks later this had increased to 1153 millions and by the end of March the amount stood at over 2,000 millions. This rapid increase in the circulation of money in an economy which was still heavily in deficit not only pushed up the level of commodity prices, but also affected the exchange rates. 'The Reichsbank's reserves of foreign exchange fell once again. Back in December 1923 the Reichsbank had been able to meet between 15 and 20 per cent of industry's foreign exchange requirements but by the beginning of March the proportion was down to one per cent. Fears that the Reichsbank would be unable to maintain the Dollar exchange rate were once again on the increase. The spectre of a new inflation re-emerged. Once more speculators began to hoard foreign exchange.

The Reichsbank was compelled to take energetic measures. The still-valid instructions, whereby foreign exchange purchase orders were to be executed by the banks only if full cover in German currency was provided by the purchaser, had not been heeded by various banking firms. The Reichsbank, responsible as it was for the currency, could not countenance such disobedience. First reminders and exhortations were tried. When these proved of no avail, the Reichsbank resorted to drastic measures to force the banks

to acknowledge their reliance upon the Reichsbank. Recalcitrant banks were excluded from using its clearing facilities, the Reichsbank refused to discount their bills until and unless they complied with the instructions. The fact that one of the four big banks was amongst those so reprimanded caused a great stir.

In the meantime the economy's need for credit increased to such an extent that whatever decision the Reichsbank reached would have serious disadvantages. It had to face the question whether to grant an increasing amount of credit to the economy – which would have meant a fall in the value of the Mark and a new inflation – or whether to maintain the stability of the Mark. The Reichsbank plumped for the stability of the Mark. On 5 April, 1924, an edict was issued whereby as from 7 April no new credit of any kind would be granted, and all new discounting of bills of exchange would be suspended: from now on discounting would only take place to the extent to which repayment of credits would cause money to flow back into the Reichsbank's cash reserves.

Understandably enough this intervention, which contradicted all the traditions of central banking, caused a great outcry. The bank stood firm against this storm. It was vindicated by success. The difficult period of credit restriction lasted no more than two months. All speculators, who had once again hoarded Dollars, exchanged their holdings of foreign exchange for Reichsmarks and thus enabled them to be used to aid the economy. The bank's action saved not only the currency, but also confidence in the currency. This confidence was not based on tedious expositions of proof or exhortations, but was supported by the weight of action. The wholesale price index, which in April had still stood at 124, was down by June to 115. If on 30 May the bank could meet only one per cent of foreign exchange requirements, by 3 June it was in a position to satisfy the entire demand for dollars. For the first time since the previous decade the German foreign exchange market functioned smoothly and properly. Only now, as was confirmed by public opinion, was there positive proof of the success of the stabilisation of the German currency. The Reichsbank's gold and foreign exchange reserves, which had at the beginning of April,

1924, amounted to 600 million Marks, more than doubled by 7 August.

At that time, in a speech delivered before a German industrial association, I justified our untraditional action in these words: 'I believe that the Reichsbank finds itself in the position of Odysseus, who had to steer a course between Scylla and Charybdis. Charybdis is the maelstrom of a new currency inflation, and Scylla is the monster which drags men from the ship of the economy, and devours them through the economic crisis which shows itself in the collapse of industry. I believe that the Reichsbank has no alternative but to make the same choice as Odysseus, that is to avoid the inflation maelstrom of Charybdis, and to steer close to Scylla, who may drag a few beings out of the ship and devour them, but allows the rest to pass through unharmed.'

Strangely enough, a few years later a literary and political dispute began about the question of who should take the credit for stabilising the Mark. Since the large majority of laymen rarely understands the connections between financial matters, this dispute centred on the Rentenmark. Thus the name Schacht became associated with the 'invention' of the Rentenmark. The German Democratic Party, which I had helped to found, plastered an election poster with the legend 'Who was it thought up the Rentenmark? Who other than Schacht, a democrat'. ('Wer hat die Rentenmark erdacht? Das war der Demokrat, Herr Schacht.')

This was a completely incorrect description of the process which effected the stabilisation. Nonetheless, it was a description which was easily grasped by the public at large. In actual fact it has never been established who really coined the word 'Rentenmark'. It was probably dropped casually in the course of parliamentary debate, and then perpetuated by habit. Indeed from the very first I myself always stated emphatically that I regarded the Rentenmark as a completely inadequate solution to the problems besetting currency policy. It was justified only by the party-political conditions then prevailing.

A contemporary authority A. G. Gustav Brecht, formerly a Councillor in the Ministry, and later for many years governor of the

Rheinischen Braunkohlen AG, said in his memoirs: 'The vehement dispute between the "fathers of the Rentenmark" and Dr Schacht which later arose over who fathered and deserved the credit for the ultimate rescue of the currency, generally overlooked the essential point. This was clear almost from the first to my friends in the Reich Ministry of Economic Affairs as it was to me. The Rentenmark was psychologically effective, but lacked a solid foundation. It was not the Rentenmark, but the subsequent rigid credit restrictions, that made the new Reichsmark currency "stable".'

A central currency bank cannot allow competition. If the Rentenbank had been made independent of the Reichsbank, Germany would not only have had two currencies, but also two kinds of credit policy. Each of the two banks would have granted credit after its own lights, and each kind of banknote would have had its own rate of exchange. The crucial criterion for the approval of the Rentenmark was that it should not be accorded the status of 'legal tender' which would have made its acceptance for payment legally enforceable. The notes issued by the Reichsbank did, however, retain their status as legal tender. Only the fact that the Reichsbank at once announced that it would accept the Rentenmark at any time at the same value as its own new Reichsmark, avoided a differentiation between the two currencies.

Modern paper money, the banknote, is backed by its creator, the State. It is true that John Law, the inventor of paper money, recommended a kind of cover based on landed property, but Law too saw that the principal security for paper money lay in confidence in the government, which has legal control over all kinds of things which would provide security. The failure which put an end to Law's measures was not so much caused by a paper money inflation, as by a collapse of speculative activity in the shares of the overseas enterprises he had founded. The value of his paper money was not based on these public companies, but only on their relationship with the state. Law rightly recognised that money, if it does not consist of tangible metal, is purely an internal affair of the national state. This remains true today.

For this reason there is no such thing as international currency. It is unlikely that it will ever come into being. International money would have to be granted the status of legal tender in all countries in which it circulates. In all these countries it would have to be possible to settle every state and private obligation in this currency. Any institution controlling this currency irrespective of whether it is a bank or a government department would dominate the world—an unthinkable situation. Currency is the most nationalistic factor in political life. Every central bank responsible for issuing it is dependent on the government of the country by whose laws it was instituted, and which makes its notes legal tender in the country's home territory.

The granting of credit is unthinkable without a central bank. No central bank can be allowed to act against the government of the country. The government is over the central bank, and influences its policies. It is thus also in a position to inflate the currency by taking up too much credit with the central bank. No international central bank could countenance such a situation. It cannot permit one of the governments with which it is associated to misuse its facilities unless every other government is in agreement. This however is a condition which cannot be reconciled with the fight of all against all in time of economic difficulty. No state will surrender so much of its sovereignty that its partners or competitors are given the power to prescribe its economic and financial policies.

Standing over and above central bank and government, both of which are led and administered by changing personalities, there is a higher, impersonal, and substantially necessary law: the stability, the constancy of value, of money. This higher law has in the past granted the central banks an autonomous, independent position. Governments change, and can pursue good or bad currency and credit policies according to whether or not it is to the advantage of the party in power. We have seen that during the period of absolute rule even the princes forged their own coinage. Towards the end of the Seven Years' War Frederick the Great also resorted to this deception, so that it was said of the silver money coined by his

court factor Ephraim, that it had 'the soul of a rogue, from outside it looked like Frederick, but Ephraim peered out from within'.

On the other hand, in a democracy the idea that a central bank might pursue policies hostile to the government is politically untenable. The only answer is that when an unbridgeable conflict between the currency conceptions of government and central bank arises, that conflict must be decided by the authority which makes the laws of the land. The populace must be informed of such a far-reaching disagreement. When in March, 1961, the German cabinet secretly decided upon the revaluation of the Deutschmark, contrary to the views of the central bank, it was a fundamental error. Had Parliament discussed the intended revaluation - which incidentally is almost universally condemned today - it would certainly not have taken place. The same thing would have happened had the central bank had the courage to promulgate its views at the time. When the opinions of the central bank on essential matters diverge from those of the government, the bank has a right and duty to put its opinions to parliament in full view of the public. Nonetheless, the example of political influence exerted over the central bank in this case of the German revaluation makes the national character of every currency especially clear.

Even if common currency is regarded and desired as the crowning achievement of the European Common Market, it would be wrong to leave the relationship between the government and the central bank out of account. Frequent reference is made to the German customs union of 1834, and to the institution of the German currency in 1873. But it is often forgotten how many sovereign rights in the economic and financial fields the individual German principalities had to surrender. For decades the Reich fought with the principalities forming the Union over their matricular contributions (yearly subventions by the provinces to the Reich). And even today the financial relations between the state and the provinces remain a delicate point in German home affairs. Here too the magic of money is manifest: it is no link between nations – it is rather the opposite. The effects of this magic are sometimes good, sometimes bad. But greater co-operation is desirable.

The closer the economic ties between various countries, the easier will it become to reach agreement on currency policies. Whether these will ultimately lead to a unitary currency will always depend on the extent to which the participants are prepared to surrender their sovereignty. Here in fact is the Common Market's chief problem.

All currency projects which emerged during the inflationary period foundered in the last resort because the Reichsbank was unable to grant anyone else the right to issue notes which would have the status of legal tender. Any currency bank, with the right to issue legal tender, existing side by side with or acting against the Reichsbank, would have been a dangerous foreign body. This situation threatened to arise when in the autumn of 1923 the battle against the French occupation of the Ruhr began to peter out.

The financial stringency which the French occupation brought to the Rhenish-Westphalian economy, gave rise to the idea that an independent Rhine-Westphalian currency bank might be founded to cater for the credit needs of the province's economy. It is no longer possible to establish whether this idea originated with the French or the Germans. In any case the French occupation authorities took up the idea with diabolic glee. It offered a means of separating the economy of Rhine-Westphalia from the rest of the Reich in a legal, seemingly-friendly, way, while at the same time seriously setting back the underground clamour for an independent state on the Rhine. Many leading Ruhr industrialists saw in the foundation of such a bank the only way to keep their concerns in operation, and succumbed to the temptations offered by the French. They did not, or did not wish to, recognise the immense political dangers which were inherent in such a move, since the majority of the capital and thus a controlling interest in the direction of such a bank would be in French hands. The Rhenish interests were at that time reproached for a lack of patriotism almost amounting to treason. Here, as in the prologue to Wallenstein, one can see men forced to act by the pressures of the moment and we must ascribe a greater part of the blame to their unlucky stars.

The Rhenish separatist movement originated amongst very

dubious elements, and was soon associated with all kinds of shady riff-raff. The movement became a serious threat as soon as the issues of money and credit were joined. The government in Berlin could give neither money nor credit, yet the Rhine-Westphalian industry needed both if it was to continue giving employment to its workers. The leaders of industry therefore felt compelled to keep faith with the French. They referred their predicament to the Berlin government, which was itself under a great strain because it could not see any way of offering help from its own resources. The possibility of founding a Rhenish currency bank was discussed with great bitterness, and it seemed quite unavoidable.

Fortunately, the French intentions were not realised. By good luck I was given the chance to prevent them from being brought into effect. Shortly after my appointment as President of the Reichsbank at the end of December 1923 and prior to taking up my office, I went to London to discuss the German currency situation with Montagu Norman, Governor of the Bank of England, who had invited me to visit him. From everything I had heard and read about Norman I formed the impression of a man who not only knew how strong was the pull which money could exert on political developments, but who also had the will to shape his currency policies in such a way that they served the best interests of a peaceful world economy. I anticipated that I would come face to face with an equanimous man with whom a sensible collaboration would be possible. I was therefore very glad when the German diplomat Dufour-Feronce, with whom I was on friendly terms, wrote to me from London to tell me what had occurred when he had announced my visit. He had said to Norman, 'I hope you will like him', to which Norman had replied 'I want to like him'.

On New Year's day, 1924, very early on in my visit to London, the conversation turned to the problem of the Rhenish currency bank. Norman was fully informed about the French plans and intentions. He had received a letter addressed to him in his capacity of Governor of the Bank of England by Finaly, Chairman of the Banque de Paris et des Pays Bas. In it Finaly, on behalf of a group of French banks, asked Norman whether he could put him in touch

with a number of English banks which would be prepared to participate with the French in the formation of the Rhenish currency bank.

Norman's assent would have meant the realisation of the project. Yet now Norman sat opposite the president of the German Reichsbank, his professional colleague, to whom he ascribed responsibilities similar to his own. His intelligence and fairness, which cannot be esteemed too highly, enabled me to explain the devastating consequences which would ensue for the German economy, and thus also for the peaceful reconstruction of the world, if the German currency were to be split into fragments. When I concluded with the remark that unfortunately the German government did not have the strength to prevent the French plan, Norman replied quite calmly 'In questions of currency I go by the views of the Reichsbank not those of the government'. Next morning Norman showed me his reply to Finaly, in which he declined his request. It contained nothing more than the sentence that he did not know of any English bank which would be interested in the proposed project. This was sufficient to take the steam out of the idea. The spectre of Rhenish separatism was finally exorcised. The magic of money, which it seemed would lead us forcibly into evil ways, had instead diverted us onto the road to good.

Naturally the French occupation authorities would have made the notes of the Rhenish currency bank legal tender. This would have meant that this legal tender would have been valid within a strictly-defined territory. Were this to have happened the first step towards the territorial separation of the Rhineland from the rest of Germany would have been taken, and what is happening today in the Russian-occupied zone of Germany would then have happened in the West. The currency of the zone is also legal tender in the German territory behind the wall.

While it was still uncertain how soon the stabilisation of the Mark would succeed, I was able to realise my original idea of a currency bank working on a gold basis and existing together with the Reichsbank, by founding the Deutsche Golddiskontbank (German Gold Discount Bank), DEGO for short. It was to operate with foreign currency, had a capital of 200 million Marks in foreign currency, and was granted a credit of bills to the value of 300 million Marks on the London market. Norman had let it be known that the Bank of England would be prepared to discount these bills. Half of the capital was paid in by the Reichsbank out of a credit granted to it by the Bank of England. The other half was raised by German banks. In order to obtain the support of the Bank of England, I went so far as to make provision in the statutes of DEGO for notes to be issued in Pounds Sterling. Such notes would, however, not have been granted the status of legal tender. Nor were they ever issued. The direction of DEGO was entrusted to the Reichsbank, and thus it really existed not side by side with, but under, the control of the Reichsbank.

The successful stabilisation of the Mark enabled the Reichsbank to repay the 100 million credit obtained from the Bank of England within a year. DEGO remained in existence. After 1945 the government quite unnecessarily and quite incomprehensibly dissolved the bank. It could have been of great value in helping to combat our new, third, inflation. DEGO was no product of National Socialism. It was founded in 1924, and already in the period before 1933 it. played a very valuable role in supporting the Reichsbank, because it was in a position to carry out a number of transactions which were in the interests of the central bank, but which the latter could not carry out itself, because they were not foreseen in its statutes. Its main task lay in the facilitation of export by accepting its bills at a lower rate of discount than the Reichsbank would have been able to. Also instead of restricting itself to bonds and bills payable within three months, it financed medium and long-term credits. It secured foreign credits which it used to support the Reichsbank during the bank crisis of 1931. During this crisis it also performed a whole series of other duties without which the crisis could not have been ended so smoothly. Thus the gold discount bank could have performed valuable services in the recent imported inflation. It would also have made a worthwhile contribution to development aid.

Germany was not the only country to which Montagu Norman gave financial and banking assistance. In the 'twenties the Bank of England helped many foreign central banks. While the French were so short-sighted that they had eyes for none but their own interests, Norman recognised the need to revitalise the whole of world trade. This was certainly also in the interest of England. The Sterling currency was the world's main trading currency and served all countries participating in trade. It was Norman's aim to make London the centre of the international payments system, exactly as it had been before the First World War with benefit to the entire world. Not until after the Second World War did London lose this position.

To the best of my knowledge no substantial reason for the liquidation of the gold discount bank has ever been made public. I am rather inclined to see the reason in the revulsion against everything connected with the Hitler era. Yet those concerned had obviously forgotten that the DEGO was in existence long before Hitler. During his era it served German trading policy well. Like the Reichsbank itself, it always and at all times met its foreign obligations.

However psychologically understandable it is that all things tainted by Hitler should be rejected, we should patently not permit ourselves to be traduced into ignoring the positive experiences gleaned in this period. We should certainly not wish to forget the horrors and crimes of the Nazis, nor should we forgive those who took part in them, but it is foolish to neglect the positive results and achievements which the German people brought forth even under Hitler's tyranny. This is true above all in the fields of social and economic policies. The placing of the interests of Germany as a whole before those of the provinces or municipalities, the abolition or at least reduction of class distinctions not only in monetary but also in humanitarian matters, full employment, the optimum use of leisure time, the social services, maternal and family welfare, the battle against waste, all these remain worthy of our consideration and deserve further development even if in some cases we are dealing only with a cumbersome attempt to learn by trial and error. The fact that they were instigated under National Socialist auspices does

not detract from their noteworthiness. This applies particularly to the economic policies prosecuted in the 'thirties. Adolf Weber said of them 'all in all the economic policy of this period was thoroughly constructive. Nay, as an economist who has made a thorough study of the world's economic problems I find it incumbent upon me to state: in all the long years between the two world wars no one in any other part of the world carried out so constructive an economic policy as we did between 1933 and 1935'. Weber made this observation not in the Hitler era, but in 1948.

However pleasing it was that the Dawes plan shifted the reparations problem from the political to the economic sphere, it soon emerged that the solution of the payments problem was not made any the easier as a result. Quite correctly, the Dawes plan concluded that Germany could meet its obligation to render reparation payments only from the proceeds of a surplus in its balance of trade. Germany would have to save or earn sufficient quantities of foreign exchange and make them available for repayments under the Dawes plan. However, Germany could save foreign exchange only by restricting its imports of foreign goods. But other countries did not wish to forego the German market as a customer for their goods. Germany could earn and set aside foreign exchange only by increasing its exports of goods. But checkmate once more, foreign countries were not prepared to buy more than a normal and moderate quantity of goods from Germany.

The world economic crisis of 1929 to 1932 reduced German exports to a very low level. The countries which had up to then been Germany's customers tried to reduce their imports, because they too had been hit very hard. This was especially the case with those countries which had granted credit and loans to Germany. Everywhere customs' duties were raised, import restrictions applied, and quotas on German goods imposed. Some countries where Germany's interest and loan redemption payments had fallen into arrears even resorted to seizing the proceeds earned from imported German goods, and using them to effect payments on the German loans. In the annual review published in December, 1931,

the Frankfurter Zeitung published a succinct account of the measures taken by foreign countries:

In the second half of 1931 fantastically high tariff walls were erected by those countries which took four-fifths of German exports. This trend began in August 1931 in France which established the first import quotas at this time. In September 1931 Poland raised its industrial customs duties by up to one hundred per cent, and Italy imposed an all round fifteen percent surcharge on customs' duties. In October 1931 France established further import quotas and in addition raised its tariffs. Six other countries joined this trend to restrict imports, and five others planned to restrict imports as from December 1931. Even Holland, a former bastion of free trade, introduced a twenty five per cent increase in duties and established import quotas. The new National government of England imposed a further fifty per cent ad valorem duty mainly on German imported specialities, and thereby added yet a further impediment to the obstacles to imports already presented by the devaluation of the Pound.

To overcome the obstacles presented by these foreign measures was a matter of life and death for Germany. Two possibilities presented themselves. The first originated in the spirit with which the National Socialist party was imbued, and consisted in the attempt to become as far as is conceivably possible completely independent of foreign raw materials. Autarchy was the ideal. Germany was to live on German raw materials, foreign trade was to be restricted to the absolutely indispensable.

Now it is certainly true that in the case of certain raw materials a substitute for imported goods can be produced at home. The only consideration to be weighed up here is whether the substitute would not be considerably dearer than the import. A higher price means a higher expenditure of labour and a reduction in the standard of living. German chemistry and German agriculture have made astounding advances in their field in recent decades; they have created many new raw materials and found quite new uses for existing raw materials. It was thus absolutely right to facilitate attempts to achieve a greater degree of autarchy, so long as this did not engender other unpleasant consequences. Yet unfortunately an

excessive emphasis on the idea of autarchy results in weakening the friendly ties between the nations, and increases isolation and estrangement.

Exaggerated autarchy is the greatest obstacle to a world-wide culture. It is only culture which can bring people closer to one another, and world trade is the most powerful carrier of culture. For this reason I was unable to support those who advocated the autarchistic seclusion of a hermitage as a solution to Germany's problems. On the other hand, I had to break the short-sighted and dangerous stranglehold which foreign countries were exerting on Germany. A way had to be found of conducting a trading policy which would ensure that Germany's requirements of raw materials and foodstuffs were met. In September 1934 I introduced a new foreign trade programme which made use of offset accounts, and book entry credits.

Apart from small transactions very few payments are made in cash. Balances are transferred from bank to bank. This is made possible either by having a cash deposit with the bank, or by the bank granting credit. This payments technique provides the banks with their greatest opportunity to increase the volume of credit granted to the economy, or to restrict it. For internal economic intercourse this means that the banking system can increase the circulation of the means of payment without the direct intervention of the central bank. Not of course by means of banknotes, but by means of the book entry. This necessitates constant vigilance and surveillance on the part of the central bank, which must always be fully aware of the amount of credit granted by the banks to industry, allowing for it in its calculations. So long as book entry credits are issued in a reasonable ratio to the goods on offer, all is well. There is however the danger that utilising the book entry credit for investments, to pay for services rendered, or even for bare-faced speculation on the stock or commodity exchanges, will lead to abuse.

My plan was to some extent a reversion to the primitive barter economy, only the technique was modern. The equivalent value of imported goods was credited to the foreign supplier in a German banking account, and vice versa foreign buyers of German goods could make payment by means of these accounts. No movement of money in Marks or foreign currency took place. All was done through credits and debits in a bank account. Thus no foreign exchange problem came into being. So long as our creditors, despite the indications to the contrary given by the Dawes and Young plans, continued to think of reparations and loans solely in terms of transferring money, rejecting transfers of goods, the new plan was the logical as well as the natural answer. It was also a practical demonstration which had the pleasing effect of gradually giving our creditors a better insight into our situation. For if these creditors thought they had found the remedy in controlling German exports, in clearing agreements, or even in impounding export proceeds to effect interest payments, the reaction in their own country must have come as an unpleasant shock to them. Those interested in the exchange of goods came into conflict with those interested solely in money. There was soon a battle royal between the exporters who sold goods to Germany, and the creditors who wanted their interest. Both parties demanded to be given preference, but the decision always went in favour of foreign trade.

I concluded special agreements with a number of states which were our principal sources of raw materials and foodstuffs. Anyone who wished to sell raw materials to Germany had to purchase German industrial products. Germany could pay for goods from abroad only by means of home-produced goods, and was thus able to trade only with countries prepared to participate in this bilateral programme. There were many such countries. The whole of South America, and the Balkans were glad to avail themselves of the idea, since it favoured their raw materials production.

By the spring of 1938 there were no less than 25 such offset account agreements with foreign countries, so that more than one half of Germany's foreign trade was conducted by means of this system.

This trade agreement system in which two countries - Germany and one foreign country - were always involved, has entered economic history under the name of 'bilateral' trading policy. It created

much ill-feeling in countries which were not part of the system. These were precisely those countries who were Germany's main competitors in world markets, and who had hitherto attempted to effect repayment of their loans by imposing special charges on their imports from Germany. The countries participating in bilateral trade were not amongst those which had granted Germany loans. They were primary producers or predominantly agrarian, and had hitherto scarcely been touched by industrialisation. They utilised the bilateral trading system to accelerate their own industrial development by means of machines and factory installations imported from Germany.

The bilateral trading system kept the German balance of payments under control for many years, but it was not a satisfactory solution, nor was it a permanent one. It is true that it enabled Germany to preserve its industry and to feed its populace, but the system could not provide a surplus of foreign exchange. No more was ever imported than was exported. Import and export balanced out exactly in monetary terms. Thus this system achieved the very opposite of what I, in agreement with the foreign creditors, had deemed to be necessary.

The bilateral trading system was not ideal. Nor was it a spontaneous invention. It was merely a reaction to and a means of overcoming the discrimination against German products. Germany's creditors demanded payment in foreign exchange, but refused to let Germany earn foreign exchange through sales of her goods. What else was left to Germany but to take its trade to places which were prepared to accept German produce? Already at the time when I introduced the bilateral trading system I made it known that I regarded it as a most inadequate and unpleasant system, and expressed the hope that it would soon be replaced by an all-round, free, multilateral trading policy. In fact the system did have some considerable influence on the trading policies of Germany's competitors. The measures taken against German exports were gradually lifted.

So far as monetary policy is concerned, the crucial aspect of bilateral trade is the fact that it takes place without any transfer of money. An inevitable concomitant was the necessity to grant credit. The foreign supplier was not always able to obtain immediate delivery of the German product which he wanted. Often he had to wait until such a product was ready for delivery, and thus had to give credit for this period. The same happened from the other side in the case of deliveries of agricultural produce which was tied to the seasons. In such a case the German manufacturer supplied his goods in advance, and gave the foreigner credit until such time as the harvest would enable him to deliver the equivalent.

Seldom did the magic of money become evident to such a high degree as in the case of this bilateral trading system. Here credit was not granted voluntarily for any private business reasons, it followed inexorably from the necessity to dispose of or acquire goods. Although the already-supplied or yet-to-be-supplied goods constituted the security for the credit, repayment was bound to the general volume of production, and thus the period over which the loan would be required was uncertain. This is also one reason why this system could not be extended in time and extent as freely as one would have wished. It was dependant on the mutual possibilities of delivering the chosen goods. In the course of the years Germany in particular found itself in arrears, because it could no longer supply sufficient industrial products. Hitler's rearmament took up too much of the productive capacity of German industry.

This bilateral trading system was something new and was useful in the circumstances then prevailing in Germany. It was, however, by no means a system of universal validity. Of course the circumstances which led me to adopt the system are not unique. It would have been possible to apply the system at an earlier date when Germany and Austria were planning a customs union. In the spring of 1931 the German Foreign Minister, Curtius, thought he could provide the Brüning government with a success in foreign policy by establishing a customs union between Austria and Germany. He had Austria's agreement in his pocket. But no-one had reckoned with France's political opposition. The project foundered and brought about Curtius's resignation.

This would not have happened had Curtius tried an offset customs account system like the bilateral trading process. The German importer of Austrian goods would have put the customs duty payable to the credit of a customs account. Conversely, the Austrian importer would have credited the German supplier. The customs duty credits would have been handed over to the state, and at the end of each year the balance in favour of one or the other of the two countries would have been settled. The words 'customs union' would never have been used, nor would the whole system have been introduced overnight. Instead it would have been extended from a few goods to a larger number, and finally to all commodities.

Bilateral trade is by no means the ideal instrument for world commerce. It does not supply foreign exchange for the purchase of such goods as cannot be obtained from the bilateral partner. Nor does it permit trade to be extended beyond the ability of one of the two partners to supply goods. Its possibilities of development are therefore limited. Multilateral trade is and will remain the goal to be aimed at. Nevertheless, the system has found wide acceptance elsewhere, and its applicability has been proved. A few days after the Court of Nürnberg cleared me, Sir Stafford Cripps, Socialist Chancellor of the Exchequer said at the opening of the British Commonwealth Economic Conference 'Schacht will take no part in any of the discussions arising at this conference. But Schacht's spirit will be present with us all. The question arises whether world trade, and particularly that of Great Britain, can be increased to the necessary extent without putting some of Schacht's ideas into practice'.

For my part I would not say that the bilateral trading system, ranks among those of my measures which are worth copying. However it can be avoided only if the international payments system functions properly, and if neither inflation nor war debts disrupt the international credit and money systems. From time immemorial war and inflation have done just that and often brought countries and people to their knees.

The Dawes plan was able to function for some seven years, from 1925 to 1931, because in that period Germany raised so many

loans abroad that it was able not only to satisfy the needs of its own economy, but also to transfer the annuities due under the Dawes plan. That, however, by no means squared with the spirit of the Dawes plan and this fact was soon brought home to foreign countries as well.

In the autumn of 1929 the sensational crash on the New York stock exchange heralded the greatest world economic crisis ever seen. American willingness to grant loans to Germany came to an end. The total volume of world trade rapidly shrank to a third of its former level. At the same time it became apparent that Germany would be unable to fulfil its obligations under the Dawes plan. Doubt about whether the Dawes plan could function permanently led to the convocation of a second committee of experts under the chairmanship of the American industrialist Owen D. Young. This committee worked out a new plan, known as the Young plan. It retained the basic idea of the Dawes plan, differing from it essentially in that it reduced the figures fixed by the Dawes plan by a little. The Young plan did not inspire confidence for it could not dispel the general feeling that the problem of reparations had not been satisfactorily solved. The loan instigated by the Young Committee (the Young loan) to bolster up German industry and the German currency, was not taken up in its entirety, remaining to a large extent on the hands of the issuing banks.

This provided proof, if proof was needed, that excessive unilateral monetary demands made by one modern industrial state against another cannot be met. Germany's debt payments came to a stop, and even the one-year moratorium which was granted in June, 1931 at the instance of the American President, Hoover, could not prevent the total collapse of the German economy in July, 1931. A year later, all claims to further reparations were finally buried officially at the Geneva conference.

After the Second World War no one tried to repeat what had been attempted by the Dawes and Young plans. This time, too, the victors took what they could by way of land and material goods: this time, too, they confiscated German foreign assets, German machinery, apparatus and stores, German patents, German industrial pro-

cesses, and even persuaded many German scientists and technicians to put their knowledge at their disposal. But they did not demand payments of money to countries abroad. On the contrary, this time the allies were wise enough to help Germany to get back on her feet through Marshall Aid. Nor was there any lack of success. While by 1931 world trade had sunk to a minimum, by 1965 it had risen to a level never previously attained.

The fools who after 1918 demanded war damages of 420 milliards from Germany should have learnt the lessons of their own history. When Bismarck came to determine the reparations to be paid by France after she had lost the war of 1871, he sought and took the advice of an experienced banker, James Bleichroeder. The amount was limited to 4 milliard Marks. This was the sum which in Bleichroeder's view could be paid without bringing the economy of France into insuperable difficulties, and without endangering French currency. France was a rich country, and justly had an excellent credit standing in the world. The damage to its industries occasioned by the war was inconsiderable, and the costs of the war had not been excessive. The war damages laid down were easily paid by France out of her own resources aided by her international credit standing. Her currency was never in danger.

In 1918 at the end of the First World War everything looked different. Where the war of 1871 had been fought with soldiers, in the 1914-18 war the emphasis to an ever greater extent was transferred from men to machines. Lives unhappily are cheap, but machines are expensive. The Franco-Prussian war of 1870-1 lasted seven months, the First World War took more than fifty months. The destruction wreaked on Germany's industry was tremendous, the financial condition of the state, and thus its credit-standing, was approaching zero.

The victors' claim that the losers should make good the enormous war expenditure was directed at a country completely incapable of paying. The total cost of the First World War was estimated at the time to amount to some 850 milliard gold Marks. Germany's share of this loss was estimated at 150 milliards. The allies thus aimed at the restitution of 700 milliards, which it was intended to squeeze out

of Germany. In actual fact the first demand by the French Finance Minister, Klotz, was for 420 milliards. That it was senseless to accept such sums in German currency, and thus in banknotes issued by the Reichsbank, was self-evident. German Marks had purchasing power only in Germany, what was needed were Francs, Pounds Sterling, Dollars, which could be spent in one's own country. Germany had already spent its gold reserves in the course of the war. Nor did it have any Dollars, Francs or Pounds. The victors therefore reverted to the methods of compensation current in ancient history. All moveable goods which could be of any use were carried away. The ancients took their booty mainly in the form of slave labour abducted from the conquered lands. With our present day social system that was no longer possible. The unemployed of the victor states would certainly have protested against such a method. But material goods were of use. Germany could supply coal, potash, ships, waggons and locomotives, chemicals, steel and other industrial products. Of course, this too would soon rouse opposition in the victor states, whose industries wanted to make and sell these things themselves. In November, 1925, the renowned Swedish economist, Professor Cassel, asserted that the prospects for further reparation payments were not good, because to effect them German exports would have to be raised to double the volume of the previous year. It was impossible to see who would accept these exports. Professor Keynes was even more pessimistic in his public utterances. It was very much to the credit of the Dawes plan that it transferred the reparations problem from the sphere of the political power game to that of economic possibility. Today it is of great interest to recall its basic ideas.

After the Second World War the division of Germany into a Western and a Soviet-dominated Eastern zone placed a great burden on financial development. All financial obligations which were imposed on defeated Germany had to be borne by West Germany. Though it may be true that the material exploitation of the Eastern zone went even further than it did in the West, financial obligations were laid upon the West alone. The world should remember the fundamental conclusion of the Dawes plan on this

theme, which demanded the 're-establishment of Germany's external and internal credit through the re-establishment of the fiscal and economic unity of the German Reich' as a basic pre-condition for a solution of the problem of reparations.

To transfer large sums of money from one country to another without providing any kind of equivalent value has proved to be impossible. In the barter economy, and in the restricted medieval money and payment system when coin still had the value of its own substance, this problem never arose. After 1918, however, it was proved publicly to be insoluble. No currency bank in the world has gold and foreign exchange reserves large enough to enable such a vast war debt to be settled. Such debts can be paid only by means of goods or services.

A currency can be used only in places where it is legal tender. Naturally in the normal course of international trade and commerce currencies are carried hither and thither, but in the last resort they can be used only in the country in which they originated. No one will purchase a foreign currency unless he is obliged to pay debts in a foreign country, or wishes to buy its products. Once again we see currency to be the most nationalistic of all economic factors.

Before the First World War the general tone of the German economy was so good that no-one gave a thought to crisis, let alone to war. I myself can give proof of this from my personal experience. Through some Austro-Hungarian friends I succeeded in June, 1914, in bringing some new issue business to my bank. The town of Budapest raised a loan of 40 million Marks, which was taken over by the Bank of Dresden, and placed on the German market. If there had been the slightest fear of war two months before the outbreak of hostilities such a loan issue would never have taken place. It was not until the assassination in Sarajewo at the end of July, 1914, that the possibility of war was taken seriously.

The war of 1914 provided telling proof of the fact that state-guaranteed paper money, unlike gold and silver coins, does not represent any substantial value. Marshal Trivulzio said that three things are necessary to make war: money, money, and yet again money. Ludwig XII asked him what armaments and stores would be required to conquer Milan, and Trivulzio was quite right to assume that he would be able to purchase the necessary arms and provisions with the money then in circulation. With our paper money this is not possible. It does not consist of gold and silver.

The war of 1914 isolated Germany from the greater part of the world market. Even at points where Germany bordered on neutral neighbours, the purchasing power of the Mark was limited to the amount which these countries were able to employ to purchase German goods. The Mark had become unusable on enemy markets. It had lost its purchasing power. The public was faced with the

fact that wars are fought not with money, but with material goods, with soldiers and their equipment, with guns, rifles, vehicles, aircraft, ships, etc. These material goods were made, not of paper money, but of iron and non-ferrous metals, of textiles and many other raw materials. Foodstuffs had to be purveyed, and this could not be done by means of paper money, but only by goods which were wanted as an equivalent.

Raw materials and foodstuffs were not available in sufficient quantities. The principal material goods which, apart from manufactured exports, could be sent to the neutral foreign countries as payment were gold coins and gold. The available funds were, however, quite insufficient to conduct a war which was to last four years. Thus in addition to the war effort, an export of goods had to be kept alive so that the proceeds might be used to pay for the required materials. The shortage of raw materials and foodstuffs led to existing stocks being allocated to consumers in strictly limited quantities. The state-managed economic system made its first appearance in modern economic history. Socialisation by public bodies entered into the free capitalistic market economy. War inclines to socialism.

But even if trade with foreign countries was a question of exchanging material goods, money did not abrogate its role in internal German trade. Here it remained a commercial instrument, a means of exchange and unit of account. In a war the state is the largest employer and buyer of goods. The state had to find money to pay the soldiers and the industrial workers, as well as for all the products required to fight the war. The normal state budget is not sufficient for such out-of-the-ordinary and one-sided needs. The state was thus compelled to resort to making inroads into the income and capital of its citizens. The mere multiplication of banknotes could result in nothing less than a general rise in the price of goods. For the quantity of goods does not increase merely because the quantity of notes in circulation increases. For this reason the savings of the population had to be mobilised. Such savings could be taken from the populace either by taxation, or by state loans to which the citizens would be exhorted to subscribe.

In 1914 the German government financed the war almost entirely by the second alternative. Through state loans it transformed the savings and movables of its citizens into claims on the state. Whether or not these claims would be honoured, depended on the outcome of the war. This method of financing was mistaken. A state which goes to war must come to terms with the fact that war is a matter of life and death, and that therefore every citizen must participate down to his last savings and last possessions. Taxes imposed upon the citizen in war-time bring him face to face with the true reality. The war loans given to him in the form of paper in return for his services, only serve to deceive him about the seriousness of the position. In 1916 the German state secretary Helfferich comforted those who subscribed to war loans with the promise that the financial dead weight of the war costs would be debited to the enemy. In 1941 Churchill was more honest when he promised the British people nothing but blood, sweat and tears.

In Germany's first enthusiasm there were voluntary acts which faced up fully to the seriousness of the situation. The Reichsbank not only delivered up its own gold, but also gathered in gold jewellery and the gold in the peoples' pockets by exchanging gold pieces and jewellery for iron commemorative coins. Yet the slogan 'I gave gold for iron' did not make any considerable contribution to the war effort. In relation to the immense military expenditure, the gold possessed by the people amounted only to a tiny fraction. The main slogan of war finance therefore remained the constantly repeated exhortation 'Buy War Loan'. By the war's end hundreds of milliards of war loan had been taken up by the German public, milliards which defeated Germany would be unable to redeem.

Germany's opponents, particularly England, availed themselves of the first alternative. There the war of 1914 was financed principally by taxes, directed in the first instance to those circles and concerns which profited from supplying materials of war. The taxation policy pursued by the English wartime government proved itself more socially just than the German policy of loans which lost their value after the war, and thus proved a great disappointment to those who had willingly made sacrifices by subscribing to them. In

Germany the numerous war profiteers were left to enjoy their gains. Apart from the profits earned from war industries, high profits were to be made from trade. Often the import of quite ordinary foodstuffs from neutral countries meant considerable gain for those concerned both inside and outside Germany. At one time during the war Albert Ballin, the managing director of the Hamburg American Line, entered the foyer of the Hotel D'Angleterre in Copenhagen, and saw the multitude of dealers gesticulating in frenzied bargaining. Turning to his companions he said 'Altogether I'd say these people between them deserve 30 years in jail'.

The First World War had two crucial lessons to teach future warmongers. Firstly that it is necessary to possess or have ready access to a quantity of raw materials and foodstuffs sufficient to cover all needs throughout the foreseeable or possible duration of the war. Secondly that those waging the war should be prepared if necessary to devote the whole of the national income to the war effort, and that the necessary sacrifices should be spread justly and evenly. When Hitler started the Second World War he had completely failed to learn the first lesson. It did not require the second sight of a prophet to forecast the unfortunate outcome of a war fought against opponents so rich in raw materials and foodstuffs as England and France. When Japan ventured to make war on America I commented 'A country which produces nine million tons of steel a year can never win a war against a country which has a steel output of 90 million tons per year'.

In 1934, in the course of a lecture which I had been invited to give before the officers of the war academy by their commanding officer, General Thomas, I said that weapons of war could not be made out of paper tokens. I also said 'The possibility of making and winning war is closely dependent on the economic strength and equipment of a nation. A modern war is unthinkable without a most highly-developed industrial technology and without the greatest efforts both in production and in distribution'. I referred to the fact that failure in a prolonged war was inevitable from the very beginning unless the continued supply of foreign raw materials could be guaranteed. I had agreed with General Thomas that these

connections between war and the economy ought to be made clear to the officers in the Academy of War so that all magniloquent military fantasies could be discouraged.

Hitler used neither taxation nor the raising of loans to finance his war. Instead he chose to print banknotes. He paid for all home-produced goods needed to wage war with banknotes which could never have held their original value. The consequence was another inflation. Legal goods quotas, price control, and restrictions on trade and commerce prevented this inflation from becoming immediately apparent. Its recognisable effects were postponed to the end of the war, but then they became apparent with correspondingly greater distortion.

My lecture to the Academy of War was thus of little avail. Most officers never learnt to understand the essence of money. Nor did Hitler have the least inkling of an understanding for money and the monetary system. This can be seen in these two stories. One evening I met Admiral Raeder at a theatre. 'You look so happy, Admiral, what is it:'

'Well, Schacht, I have good reason to be cheerful, the Führer has just granted me 60 milliard marks for the development of the navy, 6 milliards per year for the next ten years.'

'That really is something out of the ordinary, Raeder. May I make so bold as to remind you that in 1932 under the chancellorship of Brüning the entire income of the Reich amounted to no more than 7 milliards. You, however, will get almost as much for the navy alone. Where do you think all this money is coming from?'

'Well, of course, that is something which my successors will have to worry about.'

I was more than somewhat perplexed by this reply. I had not anticipated such abysmal lack of knowledge, and such frivolity in the high command of one of the three arms of the Wehrmacht. This same lack of responsibility was shown by the Minister for War, Blomberg. When in the summer of 1936 Hitler informed me that he would announce a new party programme during the coming party conference, I feared the worst. I went to see Blomberg, who, I believed, still had some influence on Hitler, and explained

our economic problems to him. All that Blomberg had to say was 'Mr Schacht, I can quite see that you are right, but I am firmly convinced that the Führer will find a way out of all our difficulties'.

It was also in the course of the First World War that I was drawn into the problem of war finance. In October 1914 I was asked whether I would be prepared to take on some banking tasks of an administrative nature in occupied Belgium. From then I was active in the German banking section in Belgium under one of the directors of the Reichsbank, Privy Councillor von Lumm. Unfortunately, I had not learnt the soldier's first commandment, which was that one should at no time and in no place ever draw attention to one-self. I drew attention to myself through a number of unusual ideas which brought me nothing but trouble, and resulted in my being sent back home in July, 1915.

One of the occupation problems was how to persuade the Belgians to pay for the occupation costs in their own currency, to enable the troops to purchase the goods which they needed. The simple solution of requisitioning the required goods against paper certificates aroused much ill will and odium, both among the populace and with the occupying forces. The chief of the banking section wished to solve this problem by creating a new Belgian currency. I considered this to be unnecessary, since it was quite feasible to work with the existing Belgian currency, but I did not have the authority to prevent von Lumm from giving effect to his intentions. However, I found an alternative solution to the problem of requisitioning. I undertook to organise the payment of the occupation costs, and had discussions to this end with the Belgian Société Generale de Belgique. I succeeded in convincing the Belgian banks of the advantages cash payments would have over arbitrary requisitioning against paper certificates. Since the Belgian government had emigrated to London, and the Belgian state as such could not therefore be consulted, I suggested the nine Belgian provinces take the place of the country and jointly raise a loan for the same amount as the occupation costs - a loan to which the Belgian public would be invited to subscribe. After many discussions, amongst which those with the German

military command were no less tricky than those with the Belgian governors of the provinces, my proposals were implemented. A loan of over 480 million Francs was agreed, to cover the first year of war. So far as I know the Belgian banks never offered this loan to the public, but retained it in their portfolios. After my departure from Belgium the German occupation authorities never succeeded in concluding another such loan agreement. I found satisfaction in the fact that one of the big Belgian banks which had participated, the Caisse de Reports et Depôts, thanked me on my departure for protecting the Belgian economy.

My work in Belgium also gave rise to a curious coincidence. I was on friendly terms with von der Goltz, the German Governor-General, who was known not only in Germany but also internationally as Goltz Pasha, because he had for years been in charge of organising the Turkish army. His desire to be in the thick of the fighting soon led him away from Belgium and back to Turkey, where he distinguished himself with his successes against the English. In the following year he contracted typhus in Baghdad and who should have the unpleasant duty of embalming his body, so that it could be transported back home, but my elder brother, who was then serving as a staff doctor in the Turkish army. Sometimes the wheel of life comes full circle in a most mysterious way.

In the case against me before the Nürnberg military court I was accused by the prosecuting authorities of financing a war of aggression, namely the Second World War. As is well known I was acquitted. Yet the theme of German war finance has always been of interest to me. Students of contemporary history have unfortunately not paid much attention to this question, but recently I came across an interesting investigation by a young historian, Gerhard Meinck, published under the title Hitler und die deutsche Aufrüstung (Hitler and German Rearmament). Meinck proves that Hitler did not concern himself with financial preparations for a war until very late in the day. At the time in question (1935–1937) he made no attempt to influence the preparations for the defence of the country. It is true that Hitler conducted his economic autarchy with oratorical swank, it is also true that he did so with complete

disregard of the practical possibilities. Meinck quotes from Hitler's speech in the autumn of 1936, which announced the four-year plan: 'Sometimes, these days, attempts are made to make it appear that Germany went to war in 1914 with carefully prepared stocks of raw materials. That is a lie.' This was in reply to an assessment which I had reached not long previously, showing that the German raw material stocks in 1914 were valued at seven to eight milliard Marks as against a bare milliard in 1936. Meinck thus demonstrates that Hitler was completely in the dark about the necessary degree of economic preparations for a war. 'Guns, planes and tanks alone are not enough,' he says.

The prosecution at Nürnberg concentrated on the question whether the rearmament I had helped to finance was preparation for a war of aggression, or whether it was only a case of armaments to be used in defence. The actual level of armaments expenditure must have a decisive influence on the answer to this question. The statements of the witnesses Field-Marshal Milch, Admiral of the Fleet Doenitz, and General Jodl showed that Hitler did not have the slightest idea what was necessary from the financial and economic point of view to wage a modern war. The head of the war ministry, Field-Marshal Keitel, when called to the witness stand, declared under oath that the total expenditure of the Reich on armaments during the financial year 1935-36 amounted to five milliard Marks, while in the following two years the amounts were seven and nine milliards respectively. Such small sums were quite insufficient to prepare for a world war.

Things were no different where the stockpiling of raw materials is concerned. Until the middle of 1936 Hitler did not concern himself in any way with the economic preconditions for waging a war. But he was repeatedly told that I, as Minister of Economic Affairs, emphasized the need to maintain foreign trade at a high level. In my deliberations with the government and business circles I always harked back to the fact that it was senseless to replace raw materials which could be imported cheaply with substitute materials expensively produced at home. At one time Goering exhorted a large gathering of leading industrialists to produce more without asking

if it would be profitable to do so. I replied a few weeks later before a public of a similar composition that to do so would be to make the German economy into a robber economy which fed upon itself. It is quite without rhyme or reason to sow one barrel of corn if the harvest will amount to only three quarters of a barrel.

Hitler's dissatisfaction with my economic policies led to his big speech at the autumn party conference of 1936 in which he announced the second four-year plan. In doing this he exposed to public view his utter ignorance of economic realities. In a discussion between my ministry and other government departments held a few weeks previously, figures for foreign exchange and raw material reserves were presented, with the caution that in the spring of 1936 the German economy's stocks of raw materials had shrunk to two months' supply. To increase the production of fuel oil substitutes would be a very slow process, and anyway the requirements of industry were too large in proportion to the present possibilities of production. Regarding the foreign exchange position, I remarked that á 25 per cent increase in exports would be necessary to pay for the level of imports which was desirable. There was no chance of such an increase taking place in the foreseeable future. In his Party speech Hitler vehemently opposed my attitude, as can be seen from the extracts from Meinck's work. Yet this speech did not contain a single indication of how the stock of raw materials might be increased, it only made demands, accompanied by accusations and threats addressed at industry.

In his book Germany's economic preparations for war published by the Harvard University Press in 1959, Burton H. Klein gave a pregnant exposition of the manner in which Germany financed the Second World War. From Klein's expositions it is clear that Hitler's financial and economic preparations for war were quite inadequate, and that the real exertions began only after the outbreak of war. Klein takes the view that subsequently Hitler and his general staff would have preferred better economic preparations for war, and he summarises why this did not happen as follows: "The first, and probably most important, reason was that a more pronounced deficit budgetary policy would have shaken confidence in the

currency, and led to a new inflation.' Klein closes this section of his book with the following sentence 'Without this concern about inflation and without such an effective champion of conservative financial policies as Schacht, Germany would undoubtedly have rearmed to a greater degree'.

Hitler's diatribe against industrialists in his 1936 Party speech raises the question whether it is at all true that the banks and industry and none other than they are to blame for the financing of war. It is not they but politicians and military men who decide about war and peace, and thus also about the existence of the state in which these industries work. What one could expect from the former is shown from the quoted conversation with Blomberg and Raeder. Industrialists and bankers are citizens of the state like everyone else. Like every other citizen of the state they are responsible for the acts of the politicians they have elected to the parliament which legislates and governs. It is easy to understand why the awful fate to which Hitler led Germany should ever and again bring up the question who is to blame for the Hitler regime, but it also easy to see why this question can never be satisfactorily answered.

To everyone's consternation the Reichstag elections of September, 1930 led to an increase in the number of National Socialist representatives from 12 to 128. This was due to the world economic crisis then in full swing. During my lecture tour of America in the autumn of 1930, I was constantly asked for my views on the consequences of this landslide. I always replied that one would have to reckon with a further growth in support for the National Socialist movement unless a more sensible reparations policy was adopted towards Germany. When I returned from the United States, I advised the Reich Chancellor, Brüning, to invite the National Socialist party to participate in the government, in order to give them a share in social and economic responsibility. Afterwards it was said that the National Socialists were not prepared to take such responsibility. That is not correct. At this time Hitler was prepared to. In the Reichstag session of 23 February, 1932, Dr Goebbels, the party chairman, stated that Brüning had made a serious error in not granting the

National Socialists a share of governmental responsibility after the September, 1930 elections. After the elections of July, 1932, when 40 per cent of all votes were for Hitler, the party was naturally no longer prepared to participate in a government whose leader belonged to a smaller party.

In a democracy it is customary and natural to offer the leader of the strongest party the task of forming a government. It is well-known that General Schleicher as Reich Chancellor fought shy of installing a non-democratic government protected by the Reich army, and that the Social Democrats and the Communists could not make up their minds to form a coalition government which would have been able to offer effective opposition to Hitler. What is less well-known is the fact that the chairman of the Social Democratic party, Wels, when asked his views in January, 1933, replied that he saw no alternative to trying to work with a cabinet chosen by Hitler.

The relevant question remains why it had not proved possible from the very beginning to pursue economic, social and financial policies which would have prevented the National Socialists from increasing the number of their representatives from 12 to 246 within less than two years. Today men who thought that even under a National Socialist government it was their duty to do their best for the welfare of Germany have reproaches heaped upon them. But one should reserve one's reproaches for those, and only for those, who did not know how to put into effect policies which would have made a Hitler impossible. In 1934 Victor Schiff, one of the leaders of the Social Democrats, wrote an article in a Socialist journal which admirably explains why the Social Democrats were unable to carry out an economic policy which would have saved the day:

'If there is any point at all on which there was not and could not be a difference of opinion between us, then it is that Hitler owes his rise and his ultimate triumph principally to the economic crisis, the despair of the unemployed proletariat, the academic youth deprived of their future, the middle-class businessmen and craftsmen threatened with bankruptcy, and the farmers brought to dire straits by the fall in agricultural prices. In this respect there can be no denying that we all failed. There is no doubt that we were right to blame capitalism for the crisis, but beyond that we were not in a position to offer the masses anything better than mere socialist cant.' It is well known that Brüning's deflationary policy did not offer a solution. It ended in financial bankruptcy, with six and a half million unemployed.

In January, 1933, after Hitler had been entrusted with forming a government there still remained the possibility of testing and influencing the government's sense of responsibility because it was answerable to parliament. Hitler had to reckon with this possibility. And it was with this reservation too that Wels declared a Hitler government as inevitable. It will always remain a mystery on what grounds the middle-class minority parties passed an enabling law which gave Hitler the power to change the constitution of the Reich exactly as he wished. The parliamentarians who perpetrated this act of political irresponsibility have never been brought to justice. A number of them reappeared in the first parliament of the Federal Republic, and others have risen to even higher political honours.

In my Ludwigsburg denazification trial I experienced an amusing aftermath to the vote on the enabling law. The former Reich finance minister, Dietrich – a forthright and diligent man – who was called as witness, was asked why he had voted for the enabling law. His reply was 'I was indeed against the law, but the majority of the German-Democratic faction to which I belonged had decided to vote for the law, and since the party members were bound by the majority decision, I had to vote with the majority'. The presiding judge asked, 'How large was the party, and how large the majority?' Came the reply 'The faction consisted of five men, two were against and three were for the enabling law'. Theodor Heuss, later to become Federal President and Reinhold Maier, later President of Baden-Würtemberg belonged to this majority.

For the sake of historical truth such things must not be glossed over. Unfortunately the blurring of historical events sets in very quickly, and often in the best-informed circles. One of the reproaches most frequently voiced by the Social Democrats is that the MEFO

(Metal Research Company) system made Hitler's war armaments possible. In the first session of the newly-elected Bundestag, Paul Lobe as honorary president referred in his opening speech to the last session of the Reichstag on 23 March, 1933 in which Hitler's enabling law was passed. Quite rightly he praised the Social Democratic party for being the only one among the parties to vote against the enabling law.

But the session of 23 March was by no means the last session of the Reichstag. This took place on the 17 May, 1933. In this session Hitler made a speech in which he declared that the German government was prepared to disarm if all other powers also disarmed. But if all the other powers did not want to disarm, then Germany would regard it as its right to take the same military measures as the others. Only after one and a half years, during which time the other powers showed no willingness to come to terms on the question of armaments, did Hitler begin to rearm. The first MEFO bills were drawn in August, 1934. Hitler's declaration in the Reichstag session of 17 May, 1933 was approved by all parties without exception, including the Social Democratic party. The decision of this Reichstag was unanimous. Thus if the Reichsbank in operating the MEFO bill system also granted MEFO bills which were used for weapons of war, it did so by the unanimous resolve of the Reichstag.

What struck me most during the time of my Nürnberg trial was the complete absence of any one with the courage to testify in my favour. Not one of my friends living abroad under the banner of freedom had the courage to confirm of his own free will the stand I took against Hitler's war policies. Not one of the many Jews to whom I gave protection, and whom I helped to save their assets, had the initiative to offer to stand witness for me in Nürnberg. Nevertheless, I can name one gratifying exception.

This letter did not contribute to my acquittal because the chief American prosecutor, Jackson, simply suppressed this witness's deposition. Had Heath addressed himself to one of the American judges or to my lawyer things would have been different. According to American legal practice, the prosecutor was not obliged to submit the deposition. But this in no way excuses Jackson's immoral behaviour. What can one say in favour of a man who was a member of the highest American Court of Justice, and who, in full knowledge of the contents of this letter, still managed to recommend my being sent to the gallows?

On 19 September, 1959, I received the following letter:

The Foreign Service of the United States of America His Excellency Dr Hjalmar Schacht. American Embassy Jidda, Saudi Arabia September 19, 1959

Dear Dr Schacht:

It has been some 14 years since I last saw you. I am sorry that I was ignorant of the publication in 1948 of your book Abrechnung mit Hitler, which only came to my attention a month or so ago. It is a fine and truthful statement. As the Nürnberg verdict stated: 'If the policy advocated by Schacht had been put into practice Germany would not have been prepared for a general European war.'

For many years I have thought to write you and tell you of an intervention I made in your behalf. I was Director of Political Affairs for the American Military Government during the time of the Nürnberg trials. My branch of the American Military Government had nothing to do with the conduct of the Nürnberg trials, but as they went on I got the impression that Jackson was seriously pushing the preposterous case against you. After consultation with Robert Murphy, now Under Secretary of State, and with the permission of General Clay, I went to Nürnberg to see Jackson. I told Jackson not only should you never have been brought before that tribunal but that you had consistently been working for the downfall of the Nazi regime. I told him that I had been in touch with you consistently during the first part of the war and Under Secretary of State Wells through me, and that you had passed on to me information adverse to the Nazi cause, impelled by your patriotism and your ambition for Germany to be a peaceful foundation element of European unity. I told Jackson that it was probably pride and the feeling that many Germans would be unable to understand the truly patriotic motives of your actions which kept you from immediately exculpating yourself at Nürnberg. I may say that Jackson did not receive my news

and endorsement with any pleasure and when his assistant, whose name I have forgotten, prepared an affidavit for my signature it was not in accordance with my testimony nor as favorable an endorsement as I had recommended. I had to insist on its being changed before I signed it. I am trying to obtain from the archives a copy of my affidavit.

I do not think my action was responsible for the verdict in your favor. I had little doubt you would be freed. Doubtless many others knew and admired your work communicated with Judge Jackson, but I am happy that I did intervene.

I am in Germany for a few days and would greatly enjoy the chance of seeing you for a moment.

With best wishes, I am most,

Sincerely yours,
Donald R. Heath
American Ambassador to
Saudi Arabia

On a suitable occasion in the case against me, I remarked that I expected to receive from the Reichsbank the pension which was due to me by agreement. The malicious cynic responded: 'Well, perhaps the cost of living won't be very high in your case, doctor.' I dismissed this macabre observation with a chuckle. Clever Mr Jackson did not expect me to be acquitted, but I was sure I would be. Jackson wanted my head, the judge let me go free.

The lesson to be learnt from all this is that war is the greatest of all possible misfortunes. Any compromise is preferable to war. War is unavoidable only when the point at issue is the defence of a nation's existence.

Despite the completely inadequate reserves of raw materials and his insufficient financial means Hitler started the Second World War. The fact that for three years it took place outside Germany's borders enabled him to make good Germany's own economic deficiencies by exploiting the occupied countries. The result was that later on when the financial reckoning came, it hit Germany all the harder and a second inflation was unavoidable. Rationing and price-control staved it off for a little while longer, but after the war nothing could stop it from running riot.

How far the purchasing power of the Mark had once again fallen as a result of this second inflation emerged only after the end of the war, and the renewed collapse of the German economy. Impoverishment and misery was far worse than after the First World War. A huge number of houses, offices and factories had been destroyed. A stream of 10 million refugees from the East clamoured for resettlement. The restrictions of the war years were made even more stringent: rations were even shorter.

Nonetheless, the extent of the inflation could not be compared with that of 1923. Although the number of notes in circulation at the end of the war was never determined exactly, it is generally estimated at between 40 and 60 milliard Marks. The task which presented itself after the war was to ensure that this level was maintained and not exceeded. In other words, the inflation had to be kept in check, it could not be allowed to spread. It would certainly have been useful to reduce the high figures in which prices were quoted. To this end it would have sufficed if the notes in

circulation had been over-printed or marked in some other suitable way, and then returned into circulation. In 1939 some 10 milliard notes were in circulation. If we take the number of notes in circulation in 1945 at around 50 milliards (the mean of the estimates between 40 and 60) then an egg which in 1939 had cost 20 Pfennigs would have cost a Mark in 1945 (all other factors affecting prices being equal). Thus, to avoid large numbers, make five old Marks equal to one new Mark.

In the summer of 1945 I was for political reasons in American custody. One day a high-powered Buick arrived at the internment camp in Ludwigsburg, and a most elegant American lieutenant emerged from the car. He asked for Dr Schacht. I was driven to the camp at Oberursel, where a very friendly American colonel asked me to tell him what in my view should be done about the German currency. Since I did not have access to documents, I could only give him my very superficial opinion that I regarded a simple change in nominal value making three old Marks equal to one new as sufficient. The colonel replied that he would see to it that all the necessary documents were made available to me, so that I could make a report. I waited three days for these documents, but none arrived. Then an ordinary private in a broken-down old Jeep took me back to my camp. I never saw the elegant Buick again.

But my short stay in Oberursel did nonetheless bring me some pleasure. A large number of so-called 'prominents' were confined to a house called Alaska. They were mostly old acquaintances, and included Admiral Horthy, the Hungarian regent, whom I later saw again in exile in Estoril. Some time later I also learnt the background to my curious visit to Oberursel. The colonel who summoned me was a friend of the famous General Patton, and a Republican. He wanted to deal with questions of economic policy in collaboration with the Germans. However, this was contrary to the policies pursued by the Democrats, who took the line laid down by the ill-famed Morgenthau. They therefore prevented my continued collaboration in this matter. I never met Morgenthau, but I had a nodding acquaintance with his father, who was for a short time American ambassador in Constantinople. My London

publisher later told me that after the appearance of my memoirs in England, old Morgenthau's son came to collect the first copy. I hope he learnt something from it. The second inflation, then, was a direct result of Hitler's war. Until then, currency policy was well run, and the economy was properly under control.

Hitler's most urgent task after taking over the government in 1933 was to get rid of unemployment. Six and a half million people had to be brought back to productive work. The problem consisted not only in the provision of the necessary financial backing, but also in finding productive work to employ people in the regions in which they lived. Public works—building roads, tunnels, canals and dykes—were an excellent source of employment. But when such works began to be carried out on a large scale it meant that large numbers of labourers had to be brought together, with all the attendant problems of the need to build hostels, estrangement from home surroundings, and many other social and cultural disadvantages. Jobs had to be found which were not tied to any one place, but which would bring orders to as many factories and workshops as possible all over the Reich.

Three main methods were used. The first was an extensive programme of repairs devised by Reinhard, the state secretary of the Reich finance ministry. Loans were granted for repairs to houses, factories, machines. They were very welcome, since during the deflation years of the Brüning era many plants and installations had suffered, because daily maintenance had been neglected. Much needed to be done in the private as well as in the public sector. One can imagine the joy and the eagerness of government administrative officials all over the country when suddenly they were at last given the money needed to carry out postponed, neglected, or abandoned tasks. The second method was the building of the autobahns, and already in the summer of 1933 work began with the building of the stretch connecting Frankfurt/Main with Darmstadt. As the number of employment opportunities grew perceptibly, the Reichsbank began to grant direct loans for both these activities. A milliard was made available for the Reinhard programme, and

600 million for the autobahn. Both amounts were later paid back into the Reichsbank,

The third method was the defence programme. The building of barracks and the equipping of troops brought orders to concerns spread over the entire country. As the cost of this part of the programme to secure employment for everyone was so great and the repayment period so long, the method by which credit was granted directly to the Reich could not be used here. There was too great a danger that the Reichsbank, in granting direct credit, would lose control of currency policy. A way had to be found which would ensure that the Reichsbank was able to restrict and limit the amount of money in circulation. It took us in the Reichsbank a year and a half to find a system which was suitable, and would still enable us to pursue a responsible currency policy. The provision of money for defence did not therefore begin until the late summer of 1934.

The system worked in the following way: a company with a paid-up capital of one million Marks was formed. A quarter of the capital was subscribed by each of the four firms Siemens, A. G. Gutehoffunungshütte, Rheinstahl and Krupps. Suppliers who fulfilled state orders drew up bills of exchange for their goods, and these bills were accepted by the company. This company was given the registered title of Metallforschungsgesellschaft (Metal Research Company, 'MEFO' for short), and for this reason the bills drawn on it were called MEFO bills. The Reich guaranteed all obligations entered into by MEFO, and thus also guaranteed the MEFO bills in full. In essence all the Reichsbank's formal requirements were met by this scheme. It was a question of financing the delivery of goods; MEFO bills were therefore commodity bills. They rested on a threefold obligation: that of drawer, acceptor and Reich. This provided the Reichsbank with every justification for discounting the bills, and, although it was put to every test by the Reichsbank's directorate in collaboration with the country's best legal brains and economists, they agreed unanimously that it was valid.

The Reichsbank declared itself ready to prolong the bills, which true to the form laid down were drawn on three months' credit, to a maximum of five years if so required, and this point was new and un-

usual. Each bill could thus be extended by a further three months, nineteen times running. This was necessary, because the planned economic reconstruction could not be accomplished in three months, but would take a number of years. By and large such extensions by themselves were nothing new with the Reichsbank; it was quite common to prolong agricultural bills, but an extension over five years, together with a firm declaration that such extensions would be granted, that was most unusual.

One other aspect was even more unusual. The Reichsbank undertook to accept all MEFO bills at all times, irrespective of their size, number, and due date, and change them into money. The bills were discounted at a uniform rate of four per cent. By these means the MEFO bills were almost given the character of money, and interest-carrying money at that. Banks, savings banks, and firms could hold them in their safes exactly as if they were cash. Over and above this they proved to be the best of all interest-bearing liquid investments, in contrast to long-dated securities. In all, MEFO bill credit transactions took place over a period of four years, and had by 1938 reached a total volume of twelve milliard Marks. This amount was not issued all at the same time, but in step with the progress in production. On average, bills to the value of three milliards were issued each year. Whether this was the right amount, whether more or less was to be issued, depended on the currency policy the Reichsbank decided to pursue. The politicians had different ideas. They wanted the highest possible number over the longest possible period. After a hard-fought battle, the decision went in favour of the Reichsbank.

This decision was of great importance for currency policy. It granted the Reichsbank the opportunity – of which it subsequently availed itself – to suspend the MEFO transactions when the currency position required that it should do so. The Reichsbank's task was made easier by the fact that until 1938 some half of the MEFO bills in issue at any one time were always taken up and held by the market, and thus not presented to the Reichsbank for discounting.

It is true that the system was novel in some of its essential aspects, and that it lay outside the normal sphere of activity of a currency bank, but it was nonetheless sensible and purposive. The risk lay not in its construction, but in the manner and fashion in which it was operated. In the first place its application had to be controlled, To this end the management of the MEFO company was entrusted to experienced Reichsbank officials. It was their task to examine all bills, to ensure that they were issued only against deliveries of goods, and not for any other purposes. Bills which did not meet this requirement were rejected, and finance or loan bills were not issued. As soon as the banks, in view of the rising demands for credit by the economy, and because of the resulting shortage of capital, ceased to be in a position to retain the MEFO bills in their portfolios, they to an increasing extent presented them to the Reichsbank for discounting. The MEFO transactions had to be suspended. This state of affairs could be foreseen in 1937, and set in with a vengeance in 1938.

In 1937 the first price increases became evident, and full employment had nearly been achieved. Employers began to compete with each other for workers. In the beginning of 1937 I therefore informed Hitler that I would be suspending the MEFO credits. A long-drawn-out dispute ensued. I threatened to resign from my post as President of the Reichsbank if Hitler did not sanction my proposed action. A compromise was reached, whereby I would continue in office for another year, that being conditional upon the suspension of the MEFO credits once they had reached a total volume of 12 milliards. Hitler agreed, and kept his word.

The MEFO bill system was not and could not be a perpetuum mobile. As soon as full employment had been reached every further granting of credit could only lead to an excess in the circulation of money, and to a rise in the price level, and thus to inflation. This had to be avoided at all costs.

Great care was also needed to ensure the repayment of the bills at the latest by their definitive due date five years after their issue. When the MEFO system was introduced I fully expected that the revitalisation of the economy would result in such progress in the growth of incomes and in capital formation that repayment would

be made possible by growth in taxation yield together with loans. This expectation was not only realised in full, it was also widely exceeded. In the years between 1933 and 1938 the Reich's income from taxation rose by over ten milliard Marks. In the same period I succeeded in placing no less than eight milliards in Reich loan stock with the general public. The means to repay the MEFO bills guaranteed by the Reich thus existed in plenty, particularly since repayment was not due all at once, but was synchronised with the growth of the economy. In the five years from 1939 something less than three milliard Marks were due for repayment each year.

In a letter dated 1 September, 1938, the Reich Minister of Finance, Count Schwerin-Krosigk, gave an admirable and detailed account of the German financial situation. In this letter, addressed to Hitler, the Count said: 'Since your coming to power the method consciously pursued is one where large non-recurring expenditure on providing employment and on defence is financed by raising credit. Insofar as this could not be effected by resorting to the normal money and capital market, that is, by means of the yearly increase in the savings of the German people, financing was effected by bills (labour bills and MEFO bills) which were discounted with the Reichsbank. This was therefore the creation of money. Such money-creation did not constitute any danger to the currency so long as the increase in the quantity of money was accompanied by corresponding increase in production. When at the turn of 1937-38 the condition of peak output had been achieved, the MEFO bill system, which had by that time reached a figure of 12 milliard Marks, was abandoned, since from that time on there was indeed the danger that the system would unleash inflation. Another reason why the system could be abandoned, is that the rising taxation revenue and growth in savings made it possible to cover expenditure by the normal means of taxes and loans. The Reich's revenue from taxes increased from 6.5 milliards to 14 milliards between 1932 and 1937.

The MEFO system was a noteworthy example of the fact that it is possible to make up for a lack of capital by means of credit without any risk of engendering an inflation which causes price rises. The stability of the currency remained assured. The risk in the whole process lay in two directions. Had it not proved possible to arrange things in such a way that a large part of the issued bills would be retained by the market and thus not presented to the Reichsbank, then an excessive use of the bank-note printing presses would have been unavoidable. This danger was avoided by making the bills rediscountable at any time, and by paying four per cent interest on them. The second danger lay in the eventuality that production might not have increased to a degree where it would yield a greater quantity of material goods and higher taxation revenue. Both dangers were foreseen, both were forestalled.

After the collapse in 1945 it was repeatedly asked whether the success of the MEFO bill scheme did not mean that whenever there was a shortage of capital savings one could compensate by replacing such capital savings with credits granted by the central bank, and thus by money specially printed for the purpose. The English economist J. M. Keynes has dealt with the problem theoretically, and the MEFO transactions proved the practical applicability of such an idea.

But the conditions under which the scheme can be applied without disadvantages are not always present. They were indeed present in Germany during the depression of the thirties. Then there were no more stocks of raw materials, factories and warehouses lay empty, machines were idle, and six and a half million willing men were unemployed. Liquid capital savings which could have been invested were not available. Production was restricted to such a degree that accumulation of capital could not take place. If rapid capital formation was once again to become possible, the powerful but stagnant productive resources had to be brought back into operation. The capital which could be expected to result from such developments was used in advance to grant credit through the MEFO transactions. Had the productive activity which was initiated by means of this credit gone awry the MEFO experiment would have proved a failure. Then the money which had been printed would not have been balanced out by capital formation, but would have led to inflation. The danger was avoided by entrepreneurial initiative, by diligence, discipline and the organisation of the German economy.

The MEFO system functioned and played its role in currency and financial policy for five years between 1934 and 1938. It would certainly have been wound up according to plan; it was Hitler's war craze which brought it to an unsavoury end. The Reich Finance Minister's letter did not make the least impression on Hitler. He was instructed not to pay the MEFO bills amounting to three milliards which became due in 1939. In a few terse words the Minister informed the Reichsbank at the end of 1938 that he was not in a position to honour the bills as provided by contract, and agreed by solemn promise. This happened, despite the fact that the Reich had the means to honour the bills. But Hitler used these means to produce yet more weapons of war, and did not shrink back from protesting bankruptcy as if he were really unable to pay.

In the first days of January 1939, the Reichsbank handed Hitler a memorandum in which it indicated its refusal to grant the Reich any further credits. The consequences were drastic. On 19 January I was dismissed from my office as president of the Reichsbank with immediate effect. On the following day Hitler issued an edict which ordered the Reichsbank to grant the Reich all credits for which the Fuhrer asked. It is true the MEFO bills were now honoured when they became due, but only with the inflated money produced by the printing presses. The second inflation had begun. I refused to take part in it. The Reich Finance Minister, whose task it had been to declare bankruptcy, remained in office.

Later on there was much discussion about the reasons why the MEFO bill scheme did not unleash inflation. The answer can be seen in the foregoing. Every MEFO bill was tied to a quantity of goods. Only bills which effected a transfer of goods from one hand to another were granted. Thus the circulation of money and the circulation of goods remained in equilibrium. And that is the basic principle of currency policy.

Serious, responsible, and successful as the MEFO scheme was, the aftermath which affected me years later was shameful and ridiculous. After I had been cleared of all blame for rearmament and inflation by the International Military Court in Nürnburg, and after I had also been acquitted under the denazification law

passed by the victors, because of my early resistance to the Hitler regime, my accusers' advocates sought in the course of my denazification to find something culpable in the MEFO bill transactions. Unfortunately, they could not understand the thing. I spent two days of the hearing trying to make myself clear. When on the third day the prosecutor asked me to explain the MEFO system yet again, I gave up, and replied 'no'.

Worse still was the fact that in 1952 the Senate of Hamburg, and thus the government of one of the States belonging to the German Federation, refused to grant me the right to found a banking house in Hamburg, on the grounds that I had offended against business morality with the MEFO bills. Now the entire MEFO scheme had from beginning to end been thoroughly investigated by the directorate of the Reichsbank and its colleagues and sanctioned and decided upon by all the members acting unanimously. All this did not prevent two of these members, the privy councillor, Vocke, and later Herr Blessing, from being chosen to manage the Bundesbank, and one other member, Herr Hülse, from becoming manager of the Landeszentralbank in Düsseldorf. The Federal government and the government of North Rhine-Westphalia were thus far from regarding the MEFO scheme as disreputable. Only the Social Democratic government of the Hansa town of Hamburg was of a different opinion. Twice - once by the administrative court and once by the upper administrative court - the Senate of Hamburg was taught the facts of the case. But it was only when socialists were succeeded by a middle-of-the-road government that this shameful drama was brought to an end. The new government accepted the verdict of the upper administrative court. The most telling sentences of this verdict read as follows: 'The directorate of the Reichsbank was acting in a framework of reasonable monetary objectives when, in considering ways of providing advance funds, it paid due regard to the fact that an increase in the volume of money would also lead to an increase in the level of production. Because it was linked with the state's measures to increase the number of employment vacancies, the MEFO bill system was suitable for this purpose. It constituted a practicable basis for the conquest of the

economic depression. The Reichsbank exercised sound judgment when at this time it abandoned the rigid adherence to the cover principle, for which the former management of the Reichsbank has been reproached, and sought to fulfil the function of a modern commercial bank by providing finance for state investments'.

When I brought this verdict to the attention of privy councillor Adolf Weber, doyen of German economists, he wrote to me 'At last we have a lawyer who has consciously made a serious effort to think out economic processes without prejudice. This should result in disenchantment with the MEFO mystique even in legal circles'.

For me the legal proceedings contained one conciliatory note. When the presiding judge asked why it was that the directorate of the Reichsbank had at the time been opposed to my nomination for the post of president of the Reichsbank, one of the witnesses, the privy councillor, Vocke, answered in four plain words – 'we made a mistake'.

My dismissal from the presidency of the Reichsbank coincided with the outbreak of the second inflation. On the very day of my departure Hitler issued his edict, and the Reichsbank was compelled to give the Reich credits of any amount which the Fuhrer might see fit. This edict was not made known to the public. Hitler must have assumed, correctly, that the edict would have immediately been linked with my departure from office. That would not have been good for the reputation of the German currency. My successor in office was the Minister of Economics, Funk.

Five months after my departure, on 15 June, 1939, the edict of 19 January was made public in the form of a law. *Inter alia* it determined that the Reichsbank's independence was revoked. The directorate of the Reichsbank was subject to the dictates of the government. The Führer decided the level of credit to the Reich. This left the gate to the second inflation wide open.

The origin, course and consequences of this second inflation have not always been identified correctly. It is in nearly all respects quite different from the first. The first inflation of the years between

1918 and 1923 came upon us like an inescapable thunderstorm. The war left Germany completely exhausted financially. Then the country was encumbered with paying milliards in war debts. Where was the money for economic and social reconstruction and for the war tribute to come from? It would have required decades of peaceful economic development. Instead Germany lived under the constant pressure of the demands for goods and money made by the victorious powers. Only in 1924 with the Dawes plan were they brought into a sensible relationship with the possible. Germany could do nothing to avoid the first inflation, the blame for its monstrous proportions cannot be laid on Germany's door.

It is quite different with the second. The National Socialists took over the reigns of government at a time when unemployment had paralysed the German economy. Amongst the credit policy measures undertaken to start production moving again, were some directed towards the reconstruction of military defences. Hitler informed me that this part of the measures taken would probably be completed by 1936. Until that time Hitler left all measures involving economic policy in my hands. He did not trouble himself with any of them, since he understood precious little about economics. After 1936 it was another matter. Hitler's military ambitions became boundless. The compromise of 1937 recounted above still gave a year's pause. But after this, new money demands led to the Reichsbank's memorandum of 8 January, 1939 and to my deposition.

The second inflation did not come as a surprise. It was a conscious and intentional measure taken by the political dictator. The Reichsbank did its utmost to prevent it, but it was politically powerless. From the day of the decree of 19 January the Reichsbank was nothing more than an administrative organ subject to the government, deprived of its own responsibility for currency policy.

When in 1945 measures were taken to remedy the second inflation, I was a political detainee of the Americans. Corrective measures were taken by the occupation forces. The attempt to enlist my collaboration was thwarted by the preponderance of the Democrat over the Republican interests in the United States. A simple and easily-undertaken currency correction, as recommended by me,

became a fearful incursion into the earnings and fortunes of the German populace.

In 1948 a number of American professors were given the task of devising a so called currency reform. The report was published under the names of Tannenbaum (the German for pine tree) and Morgenthau (the German for morning dew). Their proposals were soon humorously linked with these names ('Oh, pine tree, how green are thy leaves; one leaves notes outside the window at night, and in the morning they are covered with dew'). All old notes and coins lost their validity. Everyone received an amount of DM 40 in the new money, and employers received DM 60 for each employee. The authorities received a month's requirements, post and railways only sufficient for a fortnight. All money claims and thus also all bank deposits, savings, etc were reduced to a tenth of their nominal amount, without any regard to their economic or social significance. Mortgage bonds also lost nine-tenths of their nominal value. It is true that this was to the benefit of the debtors, but the owners of securities were injured to the same degree. It was a completely arbitrary redistribution of wealth without any social or economic foundation, the height of injustice. Against this, shares, properties, and other material assets remained undiminished in the hands of their owners. Their fortunes were left intact. Already before the reform their resources had been considerable. they were the rich. The small man's fortune was his savings book, which shrunk to a tenth of its former value. The state balanced out some part of this unequal load through the introduction of a law for equalising burdens, and a mortgage profits tax.

This transmogrification was not only as complicated as is conceivably possible, it was also a deliberate, brutal interference with the whole social structure of German society, more diabolic in its results than the inflation of 1923. The proliferation of the first inflation was due to the unpredictable course of historical events, here malevolent intention was involved. Did the German government have to acquiesce in these events? Germany had been mercilessly defeated, was surrounded by deadly hatred, and also by a great degree of ignorance. Far be it from me to reproach anyone. But I

will take the liberty of making a general observation. The Germans may be bad politicians – whether the success of others is due to greater wisdom is an open question – but Germans have always been good economists. That is universally acknowledged. For this reason Germany should use its economic knowledge and economic power to the utmost in the many international negotiations in which it is constantly involved.

Such knowledge and experience will carry even more weight if they are linked with initiative and ideas. Whatever influence Germany has regained in the world today rests solely and entirely upon recognition of its economic and political qualities. The mastery of the economic difficulties which overtook Germany between the two world wars has contributed to no small extent to this recognition.

The French have a malicious proverb: 'Les affaires, c'est l'argen des autres' – business should be conducted not with one's own, but with other people's money. We have seen how the need to finance large outlays leads to the utilisation of other people's money as well as one's own. But the risk inherent in business also leads to the spreading of the risk from one's own shoulders to those of others. In economics credit means lending money for productive ventures, the profit from which promises to provide the means of paying interest on and amortising the loan. Credit presupposes confidence and responsibility. Credit is not only dependent on the borrower's ability to pay, there is also the danger that it will be either frivolously or maliciously misused.

The borrower in accepting a loan also accepts a great responsibility, that of ensuring that he is in a position to make a profit with the loaned money. The lender runs the not inconsiderable risk that the borrower may not succeed in his enterprise, and thus be unable to repay the loan on time and to pay interest during the term of the loan. The smooth course of a credit transaction is not always dependent solely on the personal standing of the borrower or lender. Often the general economic situation and its development has a disturbing influence on the course of business. A general falling-off in boom conditions brings losses in its wake which frequently affect whole branches of business and industry.

Economic history teaches us that crises occur from time to time. The first modern economic crisis which hit the new Germany occurred in 1873. It was the crisis which marked the end of the

so-called 'founder's era' (Gründerzeit). A great deal of money had flowed into Germany by way of French war reparations, and had led to the founding of numerous businesses. Many of these did not earn the hoped-for profits, and a large number of failures ensued. This led to default on loans and capital losses.

The bank crisis of 1901 which caused the collapse of the Bank of Leipzig was the main reason why I joined the Bank of Dresden. I experienced the next crisis in 1907 while in the service of the Bank of Dresden. It suffered heavy losses, but was able to maintain its external balance sheet by a piece of face-lifting which involved the sale of a number of securities the book value of which was below their market value. So far as Germany is concerned, the war and post-war years 1914 to 1924 can best be regarded as one single continuous economic crisis. I went through it as governor of one of the big banks. Towards its end I became currency commissioner and president of the Reichsbank.

Apart from crises brought about by political events, general economic crises, as well as the collapse of individual businesses, can almost always be ascribed to a faulty credit policy. The flooding of Germany with the monies arising out of the French reparation payments in 1871, the overstretching of credit linked with it, and the flooding of Germany with foreign credits between 1924 and 1929 are the best examples of this axiom. But the crises of 1901 and 1907, which were sparked off by the collapse of individual concerns, also arose out of a wrong policy of granting credit.

These experiences have caused the state to exercise supervision over the banking and credit system. Naturally these controls are only in their infancy, and are often only of limited efficacy. This is all the more reason why economic science and economic policy have aimed at counteracting the customary fluctuations in market conditions with their resulting crises which periodically afflict the economy. It is easy to understand that it is the endeavour of every economist to avoid every kind of crisis. Since the misuse of money and credit plays a large part in such crises, monetary policy is particularly important in this respect too. Even if an erroneous financial policy pursued by the government cannot be compensated

or merely by currency manipulations, the policy of the central bank can yet intervene in many ways to influence the development of a crisis.

The ideal of all economic policies is a level of employment of the entire working population, which is constant and keeps pace with the growth of population. A large degree of unemployment brings social difficulties in its wake. In the past we have learnt how to conquer them. What we have not yet learnt is how to cope with the difficulties which are caused by over-employment. And we are still miles away from the ideal of a balanced labour market and an increase in the volume of employment which keeps pace with increases in population. Unfortunately the sufferings and deprivations of unemployment are felt immediately, while the mistaken consequences of over-employment do not show themselves until some time later. The condition of the German economy today with its one and a quarter million foreign workers is no less hazardous than it would have been with a million unemployed – perhaps it is even more so.

The post-war crisis of the 'twenties was temporarily solved by the import of massive foreign credit. The robbery with violence perpetrated on Germany by the French occupation of the Ruhr was checked by the adoption of the Dawes plan. The leading idea of the Dawes plan consisted in the attempt to discharge the milliards demanded by the allied victors as reparations out of the economy's earnings. The hopes on which the Dawes plan was built rested on Germany's peaceful development. For this reason foreign countries, particularly America, granted Germany large amounts of credit in order to help the economy to its feet. Despite this, in the six years between 1924 to 1930 there was not a single year in which Germany was able to achieve an export surplus large enough to pay the annuities due on the Dawes plan. These annuities were paid with credits. Taken all in all, in these six years Germany took up loans in foreign currency to a value of some twenty milliard Marks. One half of these foreign monies were changed into German Marks and used for internal purposes. The other half was used to pay the Dawes annuities. This half of the loans granted was thus in no wise

used for those productive and profitable investments, which are of the essence of any credit; instead, this money was spent without the least economic effect or benefit. Here, we may well have the crassest conceivable example of how not to use credit, and thus also how not to grant or accept credit.

From 1924 onwards the Reichsbank, year in year out, at every opportunity, clamoured with increasing fervour for a limitation of foreign credits. No German government between 1924 and 1930 could make up its mind to take the decisive measures required, since they all feared the political consequences. Thus nothing intervened to prevent this excessive taking up of foreign credits for what were often very unsatisfactory purposes. In 1931 all this finally resulted in the greatest financial crash Germany has ever known. I wish to make only cursory reference to these happenings, because this period in our history is sufficiently well known, but I must insist upon the size of the crisis. One must recall its severity and extent in order to comprehend its momentous impact. Germany's financial and economic emasculation which had begun with the war continued after the cessation of hostilities. The reparations rendered by Germany between 1919 and 1923 in terms of goods and services, were estimated by the Americans to amount to 38 milliard Marks. The official German estimate is 54.4. Until 1924 it was impossible to think of reconstruction. Then came six years of normal economic working, furthered by twenty milliard long-term, and 6 to 8 milliard short-term foreign credits, until the international crisis of the autumn of 1929 brought these credits to an end.

In the spring of 1931 the largest Viennese bank, the Osterreichische Kreditanstalt (Austrian Credit Institute) was compelled to suspend payments. This failure also increased the mistrust foreign lenders felt towards Germany. Many short-term loans were called in as a result. Week by week the Reichsbank saw its reserves of gold and foreign currency shrink, and this in its turn led to an acceleration in the withdrawal of loans on the part of foreign creditors. On 1 July, 1931, the Norddeutsche Wollkämmerei in Bremen suspended payment, and this resulted in its largest creditor, the Darmstädter und Nationalbank, also suspending payment. Banks; savings

banks and stock exchanges were compelled to close their doors. A considerable number of banks all over the Reich suspended payments. A hundred co-operative society banks had to be given financial support. Countless industrial concerns failed.

Only a few well-known firms will be mentioned here. In December, 1931 the locomotive and machine construction firm of Borsig, nearly 100 years old and known all over the world, stopped payment. In the same month the Hannoversche Machinen AG found itself in financial difficulties. The telephone manufacturing company, Berliner AG, lost more than half of its share capital and its entire reserves. The Körting AG had difficulties in honouring its payment commitments. The Bing-Werke AG in Nürnberg was compelled to suspend payments. The famous aircraft factory of Junkers in Dessau had to declare a moratorium and to seek state help. Vogtländische Machinenfabrik AG went bankrupt. Especially significant was the fact that the Hamburg-American Shipping Line and the Norddeutsche Lloyd as well as other shipping lines were in such difficulties that the state had to come to their aid with loans. In spring 1932 over 30 per cent of Germany's mercantile fleet was idle. By September, 1932 this figure had reached 36.6 per cent. In the course of 1932 a large number of companies were forced to use their reserves, and on top of this to eat into their capital. A special emergency decree was passed making it easier to reduce capital. In the first nine months after this decree became law 659 companies reduced their capital by a total of one and a half million Marks.

Farming was equally affected by this slump. It became the victim of an excessive debt. Agriculture was granted some relief by the moratorium contained in the law for aid to the eastern regions. The mortgaging of seed, fertilisers and natural products was suspended. A number of municipalities, including towns such as Dortmund and Essen, had to discontinue interest and amortisation payment on their loans. The social consequences of the crisis became evident in the following years. By the end of 1932 a third of the working population was unemployed and had to be maintained on a subsistence level by means of state funds. This meant that in the

densely-populated industrial areas every other family was without work and income. The political consequences did not stay far behind the social ones. The National Socialist movement grew by leaps and bounds, and led Germany to the Hitler dictatorship.

All attempts to stave off the crisis failed. Most astonishing was the central bank's passivity in the crucial months of 1931. The influence which the Reichsbank had over the business behaviour of the private banks should have enabled it to see the red light in the withdrawal of foreign short-term monies. The Reichsbank itself had after all drawn attention to the dangers inherent in the excessive foreign loans for years. But even if the Reichsbank was not absolutely in the clear about the position in which the banks found themselves in regard to their foreign obligations, it could not fail to see from its own weekly returns that foreigners were to an increasing extent recalling their loans – the resulting transactions would have been easily discernible as outside the context of the normal transmission of payment. Even if at first the signs were somewhat blurred, after the day on which the Austrian Kreditanstalt collapsed, the Reichsbank's weekly returns spoke with one unmistakeable voice.

A central currency bank can meet any internal run on the banks, and every payment difficulty encountered by trade and industry, so long as it involves only the home currency. The central bank is in a position to create as much currency for home circulation as it wishes by resorting to the bank-note printing presses. Obligations expressed in foreign currency can however be settled only by means of foreign assets and out of gold reserves. There was no need for the Danat bank to close its doors that July with a crash which unleashed panic, particularly since it was still not clear whether excessive indebtedness or inadequate liquidity was involved. It must have been within the Reichsbank's powers to ensure that the Danat bank and the remaining banks were able to pay by granting them sufficient credit. Even if the worst came to the worst - that is, had the final account revealed losses, these losses could have been guaranteed by the state. This would have been cheaper for the Reich than the total loss, amounting to four hundred million Marks, which resulted from these failures. And it would also have been

possible to spread the final loss, or some part of it, over all the German banks. All banks should, for their own sakes, have been interested in helping each other. They could not but have known beforehand that the results emanating from this, the most resounding bank crash in German history, would be to the detriment of the entire banking system.

But even if the Danat bank had been able to raise sufficient sums in the home currency to acquire the necessary foreign exchange it would have remained apparent that Germany would be unable to meet its foreign debts. The Reichsbank was unable to supply or acquire sufficient quantities of foreign exchange. Every foreign creditor could predict, on the basis of the weekly returns, when the Reichsbank would reach the stage where it had no more foreign exchange at its disposal. The over-anxious efforts on the part of the Reichsbank to obtain foreign stand-by credits in gold or foreign exchange could do nothing but increase the anxieties of foreign creditors – with the result that all who were able to call in their loans without any breach of contract did so.

The only possible way in which the foreign payments crisis could have been countered would have been to declare a moratorium of debts expressed in foreign currency. The earlier such a moratorium was declared, the more calming it would have been, and the more likely that reasonable arrangements for the gradual liquidation of the foreign credits over an extended period could have been made. Of course, it is not always permissible to translate concepts applicable to the economics of individual concerns to political economy at large. But according to civil law, a debtor who, knowing he is unable to pay his debts in full, yet makes payment to some of his creditors, without making his inability to pay in full generally known, is committing an offence. However, the Reichsbank, although it clearly foresaw that its ability to pay would soon come to an end, continued to pay every foreign creditor whose contractual obligations enabled him to call in his loans, while those creditors whose loans were not due for repayment until a later date received nothing.

When the Reich chancellor, Brüning, asked me to participate

in the turbulent discussions on how to stop the crisis, none of my proposals were adopted. Against my advice the government decided to indemnify all creditors of the Danat bank. I emphatically represented the view that only the small depositors should be protected by a state guarantee. I maintained that the large money lenders (amongst whom there were also many foreign banks) had the duty, and were also in the position, to ascertain for themselves whether or not the Danat bank was sound and whether or not it was able to honour its obligations. They should, therefore, have had to depend on a liquidation of the bank's assets for recovery of their claims. I also insisted that the capitalistic economic system could be maintained only if one could bring the individual's responsibility for the husbandry of his own capital to bear where necessary.

The manner in which the bank crash of 1931 was handled by the vested interests and the government of the Reich made a large contribution to the discrediting of the private capitalistic economy. To what degree the blame should be apportioned to private individuals, to the Reichsbank, and to the government, remains an open question. An economy based on private capital is justified only if the entrepreneurs who profit from their enterprises are equally prepared to bear losses when they occur. The proprietors of the Danat bank were by statute liable for the bank's losses with their personal fortunes. Yet they were not made answerable, but instead, as a result of the state guarantee to creditors, they went scot free.

This was the financial and economic situation when in March, 1933 I was once more called to the office of President of the Reichsbank. For six long years, from 1924 to 1930, I had sought with all my power to keep Germany's indebtedness to countries abroad within reasonable bounds. Again and again I had pointed out publicly and in discussions with the government of the day and with economic leaders, that foreign credits were expressed in foreign currency, so that foreign exchange would be required for interest and amortisation payments, but that the German economy was not earning a sufficiently large surplus of foreign exchange to enable it to honour payments on excessive foreign credits. Germany was

completely and utterly dependent on foreign confidence. When this confidence was squandered away, Germany's inability to pay came to light all too clearly.

Nevertheless, it would have been possible to avoid the catastrophe developing had a moratorium on the repayment of foreign debts been declared in time by a decision taken freely and courageously. The extent and method of enforcing such a moratorium would have had to be agreed after its proclamation and not before. However, since no one had the courage to make his own decisions and put his own ideas into practice, cleaning up the financial and currency mess had now to be done under the influence and subject to the pressure of the foreign creditors.

I was persuaded to accept office as Reichsbank president not by the need to regulate the foreign debts, but by the desperate plight of the six and a half million unemployed, which, if left unsolved, would without a doubt have resulted in Germany turning to communism. My taking up office followed upon a discussion of fundamentals with Hitler. The starting-point of this discussion was the axiom that the creation of work for the six and a half million unemployed must be the first and highest priority. This required a great deal of money.

'Have you any idea what sums might be involved?' asked Hitler. 'It seems to me quite impossible to estimate any sum out of the blue, since there is no way of ascertaining the volume of orders which would be necessary to get the economy moving.'

'But surely you must be able to indicate to what extent the Reichsbank can be of assistance?'

'Herr Reich Chancellor,' I replied, 'I really cannot give you a definite figure, I only know that unemployment must be abolished at all costs. The Reichsbank will have to grant as much credit as is necessary to achieve this end.'

In these words I summarised for myself the task which was then entrusted to me. I was not motivated by vanity, profit-seeking, nor even by party-political ties which I did not possess, but only by concern for the welfare of the masses. The creation of jobs needed

capital on which interest and amortisation payments had to be made, just as they had to be made on foreign credits, for which money was also needed. But no capital was available. The productive resources by which new capital could grow lay idle. New granters of loans were nowhere in sight. It would be a long time before credits from abroad would once again become available. At all events, I wanted to be in a position to negotiate with the foreign creditors over the postponement of Germany's debt obligations in such a way that I would regain the necessary confidence in Germany's willingness to pay, and in her efforts to acquire the wherewithal to pay.

There are two kinds of diplomacy. One is to solve all problems on one's own side, the other is to present the other side with problems. In the crisis over the foreign debts, Reichsbank and government alike preferred the first way. I had other views. I had always warned foreigners about granting excessive credit. I had predicted that should these loans exceed the required volume, it would become impossible to honour their interest and repayment conditions in addition to making reparation payments. The volume necessary was determined by the materials from abroad needed for Germany's industries, and the foodstuffs from abroad needed to feed her population. This and no more. My intention to compel the other party to share in the responsibility for the problem stood me in good stead in the negotiations over the regulation of Germany's indebtedness which I conducted with her creditors. No one could accise me of an unfair attitude and all had to acknowledge the frankness of my appeal.

Before 1933 the German government did not take any kind of initiative to arrange an international discussion of the debt problem. It allowed the world to remain firm in the belief that everything could be solved by the Dawes plan. It was left to the American reparations agent Parker Gilbert to express the first doubts about the ultimate outcome of the Dawes plan. This was in 1927, when Gilbert also urged that a new conference be called. Such a conference took place after a new committee of international experts,

chaired by the American Owen D. Young, had re-examined the Dawes plan, and suggested certain alterations. In January, 1930, the Young plan led to the government conference at The Hague. At this conference too, the government of the Reich had an excellent platform for airing its views. Quite apart from the fact that the Young plan reduced the yearly annuities payable under the Dawes plan by a small amount, it contained the same condition which had been embodied in the Dawes plan, namely that the plan must be accepted or rejected by all governments in its entirety without any amendments whatsoever. Removal of individual clauses and alteration of any stipulations was not permitted. The German government thus needed to do no more than stick to the letter of this condition in order to place itself into an unimpeachable moral and legal position. And in view of the financial crisis which had broken out a few weeks earlier, the German government would have had the entire international business world on its side.

Unfortunately the German government missed its chance. The admittedly overweeningly great desire to end the foreign occupation of the Rhineland seduced the government into submitting to hostile demands which diverged from the Young plan. The political threat that the Young plan would not be adopted, and that as a result the Rhineland would not be cleared of foreign occupying forces, unless Germany agreed to the foreign claims, triumphed over the opportunities offered by the Young plan. Politics determined the decision. Germany regained the Rhineland at the expense of payments higher by several hundred millions, and above all at the cost of renouncing German property in the regions ceded to Poland. This property was worth more than two milliard Reichsmark. I saw this readiness to yield less in terms of temporary political advantage than in terms of a permanent loss of financial trustworthiness. One could not expect a government which so frivolously gave away claims to property and capital to make any serious efforts to tackle the reparations problem in a way which would ultimately lead to an economically rational solution. A financial policy such as this could only lead to economic disaster. I resigned from my post as president of the Reichsbank.

My resolve was reinforced by the failure of the Reichstag in the field of monetary policy. If an honest attempt was to be made to fulfil the conditions of the Young plan, the utmost economy would have to be the aim of internal financial policies. The Social Democratic Reich Chancellor, Hermann Müller, had the best will in the world to achieve this end. He laid before parliament the draft of a finance bill which in its essentials corresponded with the measures proposed by me. However, he was opposed by his own party, and compelled to leave office. The foreign loans by which Germany had hitherto paid the instalments due under the Dawes plan dried up because of the world wide economic crisis. Yet after the adoption of the Young plan the German government again permitted the world to continue in the belief that the amounts demanded by the Young plan would be met. Since hitherto the amounts due under the Dawes plan had been paid solely out of foreign loans, it was clear to everyone with any insight at all that without such loans Germany would certainly be in no position to pay the amounts due.

In the summer of 1930, after The Hague conference, I undertook a private journey to the United States. I had been asked to deliver some lectures, and had prepared a few subjects. On my arrival in New York I found myself so much in demand that I had to take steps to prolong my stay. Although I had prepared lectures on a number of themes, everyone wanted me to talk about one subject that of the payment of reparations. I lectured on this to bankers, industrialis, professors, and students, in some fifty towns in every corner of the United States. I gave talks in universities, to economic associations and general meetings, in Yale, Harvard and Stanford, in towns from Philadelphia to Los Angeles. Everywhere public interest was extraordinary. Although I explained that the making of reparations payments under the Dawes or Young plans was altogether questionable, and that the whole world economy was injured by them, I never encountered any expression of ill-will. This was clear from the discussion which followed each of my lectures.

At the end of my two months' tour a publisher came to see

me and urged me to publish my lectures in book form. We deliberated about the title, and soon decided on The End of Reparations. The book was published first in the United States, and then in Germany and England. It proved a best-seller. That my lecture tour benefited Germany's case should have been apparent to the German government too. It was not even necessary to take any particular line on the views I had expressed. In answer to any questions which might be posed, a simple statement to the effect that my expositions were the views of a private business-man would have sufficed. Unfortunately, the government chose a different approach. In my first lecture, given at the behest of the German-American Chamber of Commerce in New York before some 600 invited guests from all sides of the business world, I had said 'If reparation payments continue to be made by the means now used, then a time will certainly come when the transmission of German payments in foreign currency will no longer be possible'.

My lecture was broadcast by a large radio network without any incident. The trouble only began later, because on the same day, a few hours after my lecture, the German Minister of Finance, Dietrich, declared at a press reception in Berlin that Herr Schacht was not authorised to make such statements, and in no wise expressed the views of the German government. I myself had never made such a claim. But the unpleasant thing about Dietrich's statement was that it could not but give the impression that the German government considered it would be possible to continue paying reparations in accordance with the Young plan.

The same thing happened when, having given a talk in Stockholm in March, 1931, I was asked by a reporter what I would do if I became Chancellor tomorrow, and answered 'I would stop reparation payments the very same day'. Here, too, it was a case of views on economic affairs expressed by a private German citizen. This did not prevent the government from once again promptly and publicly repudiating my statement, thereby again giving the impression that the Reich government considered continued reparation payments to be practicable. While I was constantly endeavouring to give foreigners something to think about where the problem

of reparation payments was concerned – and thus to throw the ball into their court – the government ever and again frustrated my efforts by adopting an official attitude, which contradicted my private pronouncements, without the slightest justification.

Fortunately the campaign which I undertook in America to throw some light on the subject of reparations was not entirely confined to the general public. In the course of my journeys I had private talks with a whole series of politicians. Most impressive was my visit to the American President, Hoover. I first became acquainted with him during the First World War while carrying out my duties with the occupation authorities in Belgium. Here Hoover gained the confidence of the Belgian people and put them very much in his debt, because he organised American help for civilians. Hoover became president of the United States in 1928, and it was his misfortune that the world economic crisis broke out during his term of office. Hoover was by far the most distinguished American of his time, but in the face of this catastrophe he, too, was impotent; he was not re-elected in 1932 for this reason. Economic depressions of such magnitude are as a rule followed by great social changes.

In a completely private discussion in the White House which lasted nearly an hour, I gave Hoover a comprehensive exposition of Germany's economic position, and pointed out to him the absurdities of the war tribute which masqueraded under the name of reparations. I found him to be extremely understanding. Half a year later, in June, 1931, Hoover pushed through the moratorium on reparation payments which set the seal on their end. Once again, the initiative for this moratorium came not from the German but from the American side.

The collapse of the Darmstädter und Nationalbank took place a few days after the Hoover moratorium. This heralded the highwater mark of the German bank crisis. Until that day the Reichsbank had without hesitation paid from its gold and foreign exchange reserves all that was due on the withdrawn foreign credits. It held firm in the belief that the withdrawals of credit would cease if demands for repayment were met promptly. It did not foresee that the opposite must needs take place. Since the foreign creditors could see from every weekly return by the Reichsbank how quickly the gold and foreign exchange reserves were dwindling, everyone hurried to get his money back before zero point was reached. Instead of decreeing a moratorium on such foreign exchange payments, everyone waited, until the collapse of the Danat bank made payment suspension inescapable.

The Hoover moratorium applied only to reparation payments, and not to the remaining foreign debts. The bank crisis showed that a moratorium was necessary for these debts too. Amongst such debts the short-term loans clamoured most strongly for repayment. They had been granted mainly by foreign banks. Once again it was the foreigners, not the German Reichsbank or the German government, who took the initiative in effecting the regulation of their repayment. Already on the third day after the collapse of 13 July, the London acceptance banks and the competent New York banking houses decided to prolong all German obligations due in the next three months. This three-month extension of the loan period was followed from time to time by discussions about the postponed repayments, with the result that the rate of repayment was synchronised with the availability of foreign exchange. The foreigners pressed for an exchange control system such as the Reichsbank had hesitated to introduce until the collapse overtook it. Now on the basis of the negotiations with the foreigners exchange control was introduced, and on several occasions before the year's end it was made more stringent. Although an economy subject to exchange control came into being because of Germany's inability to pay, it is interesting to recall that this exchange control was introduced on foreign insistence. Exchange control and payment suspension slowly brought about a partial improvement in the situation.

The problem of repaying the long-term debts remained. Without taking the reparations into account, these amounted to three times the volume of the short-term debts. In July, 1932, the German Papen government succeeded at the Lausanne conference in coming to an agreement whereby the reparations creditors renounced

further reparation payments. The loans, amounting since 1924 to some 20 milliard Marks, remained. Interest and amortisation payments were still due on them.

I could not understand why the German authorities had exercised so little initiative in tackling the bank crisis and its consequences, although signs of this development could be seen long before it took place. This passive debtor diplomacy was not to my liking. When I once again took over the direction of the Reichsbank in March, 1933, I turned my attention as quickly as possible to the need for measures to regulate long term foreign debts. A delay of two months was occasioned by the fact that in April, 1933, the German government sent me to Washington to prepare for the world economic conference which had been instigated by the United States, and which had for its aim the ending of the world economic crisis. For three and a half years this crisis had disrupted the international money and credit system. Now all countries participating in world trade had been invited to London for talks about ways and means of ending the crisis.

My discussions with the American president, Franklin Roosevelt and the foreign minister, Cordell Hull, in April, 1933, gave me the opportunity to acquaint them with the hopeless financial and political position in which Germany found itself. After a few discussions for which I had prepared my brief I frankly explained to President Roosevelt in the presence of his foreign minister, Cordell Hull, and the German ambassador, Luther, that it would shortly become necessary to suspend for the time being all payment of interest on the loans granted to Germany. Roosevelt's reaction was quite astonishing. I had expected an indignant response, instead Roosevelt slapped his thighs and exclaimed laughingly 'Serves the damned Wall Street bankers right'. Naturally on the next day Cordell Hull handed me a letter which he had no doubt instigated himself, in which the President expressed himself as extremely shocked by my expositions. I did not take this letter very much to heart. A shock received 24 hours after the event cannot be very serious. Hull and Luther were the only ones who were really shocked.

The London world economic conference was a shot in the dark. It did not bring one single positive result. I therefore concluded the final speech of the German delegation with the following words 'It will be necessary for each country to put its own economic house in order first of all. Once this has been done perhaps a new world economic conference will have a chance of succeeding'.

I myself took immediate steps to put Germany's economic house in order. Even before the beginning of the London world economic conference in June, 1933, I had, after my return from the visit to Roosevelt, asked foreign bankers as representatives of Germany's creditors to come to Berlin for discussions. They all arrived: from England, France, USA, Belgium, Switzerland, Holland and Sweden. I began our discussions by observing that an honest debtor was obliged to give his creditors a full and frank account of the state of his income and capital resources. The Reichsbank performed this obligation in every particular. I gave the august banking gentlemen every opportunity to examine our books. In the ensuing discussions I pointed out that we Germans were better able to judge our position and our potentialities than foreigners could, and that we would therefore be in a better, indeed, perhaps even in the only position to make suggestions which would best enable us to satisfy our creditors. My expositions found unanimous assent, and together, debtor and creditor, we laid down the basic principles which should be taken into account in the future. These basic principles were:

a) It was agreed that the gold and foreign exchange reserves still at the disposal of the Reichsbank had reached such a low ebb that a further drain could not but jeopardise the full function of the bank as the central currency institution, and that it was therefore desirable to increase this reserve step by step.

b) It was further acknowledged that the fall in the German balance of payments surplus made it essential to consider ways of protecting and

extending Germany's foreign exchange earnings.

c) It was generally acknowledged that it was necessary to promote German exports of goods by all possible means, since this was the only way in which full resumption of payment transfers could be effected, and

that in the last resort large international debts and obligations could only be settled by means of goods and services.

These conclusions reached jointly with the foreign creditors must serve to disarm all reproaches which allege that the debtor made one-sided decisions without heeding the views of his creditors. The creditors acknowledged that further losses of gold and foreign exchange could not be permitted. On the contrary, the stocks of gold and foreign exchange would have to be renewed. It was acknowledged that payments could be made only on the strength of increased exports. I built on these foundations, accepted by the creditors. I maintained the view that we were not dealing with a moratorium in the debtor's favour. The debtors should be obliged to meet their obligations, as before, in German currency. It was merely a case of a delay in effecting the transfer from German into foreign currency. The debtor's liability to pay in full remained.

In order to reassure the creditors in this respect, insofar as this was within my power, I instigated the law of 9 June, 1933, which brought into being the so-called foreign exchange clearing office. Into this office, which was under the Reichsbank's management, the German debtors were obliged to pay the amounts due in interest and amortisation. Transfer in foreign currency would then be undertaken by the Reichsbank as soon as and as far as this proved possible.

Naturally, the suspension of interest and amortisation payments was not a pleasant thing for foreign debtors. But there was no other way out. The creditors were left with two alternatives: either they could wait until a transfer of the amounts accruing to them was possible, of they could find other uses for their credit balance with the foreign exchange clearing office. I employed every opportunity to introduce such other uses. I freed moneys for every use within Germany which did not lead to the export of money, goods or services. Thus, for example, there were funds for journeys and holidays in Germany, for gifts or relief to German relatives or friends, and many other similar things. Many jokes were made about the different sorts of Mark I created in this way. But when after the

Second World War England found itself in similar currency difficulties and was compelled to introduce partial foreign exchange control, she also initiated very similar ways of utilising sterling balances.

The different varieties of Mark were dealt in quite legally and freely on the stock exchange, and naturally they were quoted at a discount. On selling his Mark balance the creditor lost part of his outstanding debt. The consideration which influenced his decision to sell or not to sell was whether he could not do better with a smaller capital sum available immediately than with the full amount for which he might have to wait many years. If he possessed a German bond yielding five per cent and found it possible to earn 8–10 per cent if he cashed the bond immediately, it was to his advantage to sell his German bond at a discount. I never compelled any foreign debtor to forgo a part of his outstanding debt. The choice whether to wait, or whether to utilise his outstanding debt immediately by realising it at a discount, was always left to his own free decision. After all, I myself was not responsible for the transfer moratorium. It had been instigated before I came on the scene.

The negotiations with the foreign debtors took place in an atmosphere of good intentions. In respect of Germany's foreign indebtedness a deferment was the only solution. To create work, money had to be provided immediately. Here the Reichsbank could help only by means of generous grants of credit. The first measures to create work were those comprised in the programme supervised by the State Secretary, Reinhard, whereby improvements and renewals of houses, factories and machines were undertaken. Then came the building of the autobahns. In addition, all the projects of the provincial authorities which had been suspended for lack of money were once again set moving. In the second half of 1934 to safeguard defence, the task of rearmament was added to these earlier projects. The means by which we overcame the problems attendant on all this was shown in the last chapter.

The two world wars taught us certain lessons about the nature and management of money. The creation of money is harmless only if it is accompanied by a simultaneous increase in the quantity of services and goods. To render payment without receiving any equivalent value is possible only to a very limited extent. Often such payment is damaging economically. This is just as true for the national economy as it is for the economy of the individual. Gifts and expropriations (robbery, war tribute) are exceptions which are uninteresting from the point of view of political economy. The party political slogan 'prosperity for everyone' is based on false premises. Permanent and sufficient prosperity comes only to those who diligently and ably work for it, those who acknowledge and fulfil their economic responsibilities. They deserve prosperity, the lazy and incapable must be satisfied with a guaranteed minimum level of existence.

Inflations do not hit everyone to the same extent. Both German inflations, that of 1923 and that of 1945, brought changes in incomes and fortunes in their wake which affected different sections of society in quite different ways. Readily realisable monetary resources are more rapidly eroded than hard-to-realise material goods. For this reason owners of money, those who have claims to money, particularly pensioners, and those living on fixed incomes, always suffer more as a result of inflationary falls in the value of money than do owners of tangible assets.

Especially useless are arbitrary changes in the value of money. When Austria was annexed in the spring of 1938 Hitler had the bright idea of giving the Austrian Schilling a value higher than its market value of 50 Reichsmark, because he thought he would thereby be giving the Austrian workers a present. The Reichsmark became legal tender in Austria. While the market would have paid two Schillings for a Reichsmark, one Mark was made equal to one and a half Schillings. I tried hard but unsuccessfully to dissuade Hitler from putting his idea into practice. Its effect was that all Austrian prices rose immediately by a corresponding amount so that economically-speaking nothing changed. What did result, however, was a great deal of office work, because all balance sheets and account books had to be converted to the new parity. All owners of mortgages, bonds etc and thus all the capitalists (amongst whom were many Jews) received a free gift. The masses went away empty handed.

The little man abhors inflations not only because it makes saving very difficult or impossible, but above all because it makes the rich richer and the poor poorer. Inflation upsets the social structure. Owners of material goods gain, savers of money lose. Every inflation intensifies the battle for a share of the social product. The inflation in which we find ourselves today has contributed to the increasing number of wage claims made by the unions. The first inflation of 1923 was forced on Germany from outside. The second inflation of 1945 was deliberately brought about by Hitler. Today's third inflation is due to both external and internal political factors. The danger signs indicating the approach of an inflation can be recognised from afar. And it is possible to take countermeasures. After the deflation years of the first half of the 'thirties, 1938 again saw full employment with an attendant shortage of workers, rising prices, and lack of capital. These were the storm signals heralding Hitler's inflation. In 1956, as a state of full employment had again been reached, there was once more a high demand for labour with rising prices and a shortage of capital. The signals showed that an inflation was imminent.

The economic policy which led to full employment by 1956 was basically correct. It was founded on the recognition of the immense need for reconstruction after the chaos left behind by the

war, and also on the newly emergent demands coming from the many countries which had recently become independent and were now entering world trade in their own right. Their dearest wish and immediate goal was to reach the technical and cultural level of the industrialised West as rapidly as possible. Industrial countries were faced with a practically limitless demand.

Unfortunately in Germany this boom was fostered too strongly by the encouragement of greater home consumption (exhortations to buy vacuum cleaners, refrigerators, washing machines) as well as by copious investment aid (tax reliefs and concessions, subsidies, extensive and cheap credit). As a consequence frugality, and the need to reduce costs wherever possible, was forgotten. Many expenses (promotion and business entertainment) as well as luxuries like prestige buildings could be written off as tax-free deductions. This was the origin of the popular suggestion that half of every outlay on expenses is paid for by the Exchequer. Tax concessions made it easier for large concerns in particular to finance themselves from their own resources. The professions and others belonging to the middle classes could not accumulate new savings at the rate which was needed. The capital market, which in normal times had given industry powerful financial assistance, could not keep pace with the rate of development.

The grave social implications of the above lie in the fact that in he main all these concessions favoured the owners of real values who already had large capital resources. Amongst such concessions were the extraordinary depreciation allowed under Articles 7c and 7d of the income tax law, and Article 36 of the investment aid law, which were in the first instance designed for the building firms, the wharfingers, and the so-called basic commodity concerns. This policy is a little reminiscent of Louis Philippe's 'Messieurs, enrichessez vous'. By means of regressive depreciation more than 80 per cent of the value of a plant could be written off tax free in the first five years of its life. Some 50 million DM which could have been paid out in dividends were withheld from the capital market as a result. This financing out of one's own means was accompanied by a steadily increasing volume of bank credit.

The inflationary developments came into public view most prominently through the figures issued by the central bank. The fact that in 1938 with a population of 70 million and in a condition of full employment a note circulation of eight milliards was sufficient, while at the present time also in a condition of full employment but with only 50 million inhabitants, double this amount has been reached, presents us with a phenomenon which cannot be healthy or right. The warning notes sounded by all this were not heeded by those who shape Germany's economic policies.

In June 1956 I gave a lecture before an audience of members of the association of young employers and the junior section of the association of independent employers in Essen. In this lecture I first made public my views on this development and its consequences and implications. As starting point for my observations on monetary policy I referred to the fact that our considerable export trade brought in a large quantity of foreign exchange which the central bank converted into German currency, thereby inevitably increasing the note circulation. Export is essential for a Germany short of raw materials and foodstuffs. But the conversion of the export surplus into German currency which unleashes inflation, as well as overheating an already booming economy, should not be allowed. Instead such surpluses ought to be used to rebuild Germany's foreign investments in order to secure the supply of raw materials, and ensure future orders for German goods. In addition to the surplus of foreign exchange, I singled out excessive government expenditure as a second cause of inflation.

I could quote this lecture almost in its entirety, so relevant are its conclusions to the present-day situation. Then the danger of an imported inflation, caused by the excessive conversion of foreign exchange into Deutschmarks, was greater than one caused by domestic factors. For this reason I urged that 'where measures to encourage investment and credit grants are concerned, the emphasis should, within the bounds of the existing surplus of foreign exchange, be transferred from the home economy to building up assets abroad'. I also recommended that debts incurred abroad should be repaid in advance of their due dates.

In April of the following year I made another speech, also in Essen, and this time before the association of wholesalers and export traders. The subject was the politics of the capital market. Formerly, the market in fixed-interest bearing securities had been a constant prop for industrial financing. This market was fostered not only by the institutions, but also by the small saver. I criticised the fact that now it was just the institutions with large amounts of capital at their disposal (social and other insurances) who deposited their funds in the banks instead of investing in bonds or debentures or other securities, thereby contributing to the erosion of the security market. Long-term loans for investment were replaced by shortand medium-term bank credits. Regarding the pressure of imported inflation, I pointed out that the basic problem, which was either not recognised or ignored, was that foreign currencies could be utilised only abroad, and not in the domestic economy.

At the beginning of 1959 an event took place which was to have a fatal effect on the progress of the imported inflation. The countries most concerned in world trade agreed amongst themselves to make their currencies mutually convertible without any restrictions. The German economy welcomed this development. After all, since the bank crash of 1931 the traffic in foreign exchange had always been hedged about with government restrictions. Now at last German Marks could be exchanged at will into each and every foreign currency. International credit and capital traffic was now freed from all obstacles. It was only later that the hidden disadvantage of this agreement became apparent. It consisted in the fact that the exchange of currencies had to take place at the rigidly-fixed rates of exchange laid down by the International Monetary Fund in 1944. While everyone was overjoyed at the possibility of acquiring with German money any quantity of foreign exchange they wanted, everyone overlooked the fact that by the same token any quantity of German Marks could be acquired with foreign exchange. Export proceeds, foreign credits and capital investments flowed to Germany in large amounts as a result of the German boom. Their conversion into German Marks effected an increase in the quantity of money in circulation which the Bundesbank was no longer in a position to regulate.

In a lecture on European policy in the light of market conditions delivered in 1958 I said that 'permanently productive investments for Germany's foreign exchange surplus must be found'. The only correct solution was to invest foreign exchange surpluses to good effect in the place where they originated – in other words abroad. In October, 1960 I delivered another lecture in Stuttgart, and under the title 'An End to Inflation' I once more summarised all the arguments against the third inflation, which had by then broken out. In order to make quite sure that my expositions were right I asked my neighbour in Munich, the grand old man of economics, Adolf Weber, to cast his eye over my manuscript. He read it, and returned the draft of the lecture to me with the words 'I subscribe to every word'.

Why do I mention these lectures? Because I wish to recall the fact that the signals pointing to the impending inflation were clearly there, to be recognised by all experts.

There has been much discussion about the extent of the third inflation. Everyone has appealed to some different set of statistics about price changes. Unfortunately price indices are compiled according to very different basic assumptions which can be interpreted differently. In public discussions commentators sought to show that the value of money was falling by from two to five per cent each year, the difference in percentages being accounted for by the differences in political outlook. But there was general agreement that an inflation was in progress, irrespective of whether the devaluation of the Mark in the course of the last decade and a half amounted to 20 or 30 or 40 per cent. No move was made from the official side. Neither in public statements nor in the responsible government circles was there any sort of discussion of my statements, and no one made any attempt to prove them wrong. Neither Erhardt, the Minister of Economic Affairs (although when he wrote to congratulate me on my 85th birthday in January, 1962, he even went so far as to mention my expert knowledge in the

field of finance) nor the President of the Bundesbank, Blessing, who had been schooled in the Reichsbank at the time of my presidency, deemed it necessary to concern themselves with my warnings.

Had the increase in the volume of money been restricted to domestic inflation, it would certainly not have reached a level sufficient to cause public concern. But after 1960 the imported inflation became serious, and made itself felt everywhere. The central bank's reserves of gold and foreign exchange grew month by month to quite unusual figures. The general price level and particularly the cost of living rose steadily and alarmingly.

Since inflationary signs had begun to appear in other countries too – everywhere a shortage of capital savings was leading wrongly to the creation of money through bank credits – the world of the international experts began to concentrate on the problem of inflation. At a conference of the International Monetary Fund which took place in Tokyo a the autumn of 1964 the British and American Finance Ministers expressed the view that the difficulties of rebuilding world trade could only be tackled by means of a systematic, slow, but gradually-progressive inflation. This attitude prompted me to abandon my reserve.

Two ways were open to me: I could either make another direct approach to the personalities interested in and responsible for financial policy, or I could make another but more spectacular approach to the general public. To avoid possible reproaches I chose the first way. I prepared a memorandum suggesting how the inflation threatening from many quarters might be countered, and submitted it to a friend who as an industrialist played a leading role in the life of the German economy. His reaction was positive. He agreed to my request that my suggestion be passed on to the competent authorities. The Minister of Finance, Dahlgrün, expressed his interest, Chancellor Erhardt wished to see this expert report by a top banker. Five months went by, and I heard nothing. Nor was anything done. I was forced to remind myself of the old adage 'he who does nothing makes no mistakes apart from doing nothing'.

I therefore decided to try the other way. After my earlier experiences, particularly those in Stuttgart, I knew I had to express myself in a manner which could not be ignored or suppressed. This led to my writing an article which treated the theme in common parlance. The article appeared in November, 1964 in the Munich illustrated magazine Quick. It was not long before the reaction, alarmed and perplexed, set in. The response was amusing, and yet at the same time shaming. But at all events my serious aim had been achieved - the battle against inflation moved into the centre of the political arena. Now I was to be the victim of ignorance and political narrow-mindedness. The Süddeutsche Zeitung took the view that I should be altogether debarred from expressing views on questions of monetary policy. The editor of the Zeitschrift Für Das Gesamte Kreditwesen, Muthesius, alleged that during the period in which I had been President of the Reichsbank the gold reserves vanished, and an economy subject to exchange-control was introduced. This expert did not know that during my presidency the Reichsbank's gold reserves rose considerably, and that the coffers were emptied during the presidency of my successor, Luther. He was equally ignorant of the fact that exchange-control was introduced by this same Luther in the course of the second half of 1931 when I was no longer President.

As against these attacks, there was no gainsaying the fact that the million-odd readership of Quick expressed its lively agreement with my article, and the report of the commission of experts instructed by the government and parliament to examine the whole development of the economy which was published in 1965, made discussion of the prevailing inflation its central theme. The government's reply to this report was very feeble. And a rebuttal of my statements did not appear. The government spokesman who suggested that I was no expert on questions of currency did not know that three years earlier Chancellor Erhardt, who was then his boss as Minister for Economic Affairs, gave me credit for the opposite. The Socialist deputy, Wehner, of whom I will charitably assume that he never knew anything about MEFO bills, spoke scornfully about MEFO bill-juggling.

It was noticeable that amongst those who denied that there was inflation was Karl Blessing, President of the Deutsche Bundesbank. In a speech delivered in the Berlin Stock Exchange on 22 January, 1965, he explained 'Anyone who speaks of a third inflation is guilty of sheer alarmism. The slight price rises over the last ten years have nothing in common with an inflation of the type we had because of the two world wars'.

Now I never maintained that anything was of the same type as the inflations of the two world wars. This was something Blessing had added and something unfortunately not in the spirit of the injunction to remain intellectually honest made in the same lecture.

The remark which linked the two world war inflations shows that Blessing was not clear about the variegated character of inflations. He bracketed those of 1923 and 1939 together. But – I repeat – they had quite different causes. The inflation of 1923 came like an unasked-for thunderbolt, and for a long time it was not even properly identified. The second inflation came about in 1939 as a deliberate political act aimed at furthering the war preparations which could not be projecuted by normal means alone. The third inflation – in the midst of which Germany finds itself today – was, it is true, not deliberately brought about, but it was recognised in good time. It was accentuated by the enormous quantities of foreign exchange converted into Deutschmarks as a result of the obligations entered into under Germany's agreements with foreign countries. The three inflations thus had quite different causes.

The obligation to convert foreign into home currency without limit contains a great danger for the central currency bank if it takes place at fixed rates of exchange. This obligation also precludes the enforcement of certain 'basic' laws. Paragraph 3 of the German law relating to the Bundesbank – and this currency law must after all be included amongst the basic laws – lays down that the German Bundesbank must regulate the circulation of money. The stability of a currency cannot be maintained if the central currency bank is not in a position to regulate, i.e. determine, the quantity of money in circulation. The importance attached to this point by the law-givers is shown by the fact that in a supplement to the Bundesbank

law issued in 1957 the minimum reserve of the banks was put into the hands of the central currency bank with the newly-formulated and expressly-stated basis that it should be used to regulate the quantity of money in circulation.

The decisions of the International Monetary Fund, to which the Bundesbank, as all other members, is subject, made it impossible for the Bundesbank to determine the quantity of money in circulation. An unrestricted influx of foreign exchange which must perforce be converted into German Marks influences the quantity of money in circulation in Germany in a manner outside the Bundesbank's control. Objections to such an impediment to the enforcement of a German law were really necessary and would have been morally justified. The Bundesbank did not object. A discussion of this state of affairs in the German press would soon, by agreement with the partners to the decision, have led to a prevention of the damage which Germany was forced to suffer. Public discussion of the issues would have strengthened the Bundesbank's hand, and in the meantime it would have been possible to carry on independent unilateral trade. In my Quick article and in several subsequent articles I made reference to such an interim solution.

If Blessing denies the existence of the present-day inflation or minimises it, and if the basic difference between the first and second inflation remains a closed book to him, then we can only conclude that a proper idea of what inflation is has eluded him. I am supported in this conclusion by the following facts: on 7 January, 1939, the directorate of the Reichsbank addressed a memorandum to Hitler, signed by all eight members including Blessing. It intimated that the Reichsbank would refuse to finance the Reich's expenditure on re-armament. The result was that I, together with vice-president Dreyse and Reich budget commissioner Hülse, was dismissed from office with immediate effect. On the very same day Hitler issued the order which obliged the Reichsbank to grant the Reich such amounts of credit as Hitler might at any time dictate. Thereupon our colleagues, the Privy Councillor, Vocke, Blessing and Erhardt, also tendered their resignation, which was accepted. They

too did not want to be responsible for the inflation. In order to avoid attracting attention, the decree was not published until June, 1939. At the same time the Reichsbank formed a managerial committee to assist the directorate. This committee continued to operate until the end of the war and carried out the measures which led to the inflation. Blessing joined the committee in June, 1939. He thus assisted in bringing about the inflation for six years until the end of the war.

Germany had had an influx of foreign exchange once before, when between 1924 and 1930 loans to a value of some twenty milliards were taken up abroad. The extent and the futility of my efforts to stem this excessive inflow of foreign exchange and its consequences (the bank crash of 1931, and the inability to meet foreign debts) have already been described. Here I only want to establish that the Bundesbank not only knew of these events, but must also have had them very much in the orefront of its mind. If nevertheless the Bundesbank raised no objections to the flood of foreign exchange which took place between 1956 and 1964, this can be explained by the fact that the Bundesbank always found itself on the horns of a dilemma. It was obliged to change all foreign currency into German. Marks. It could do nothing to prevent the receipt of export proceeds. But in addition to export proceeds, foreign credits and capital investment also came into the country, and the bank felt itself obliged to stand by and watch without offering resistance. It could combat domestic inflation with a high rate of discount and by granting credit charily at a high rate of interest. But high rates of interest and credit scarcity attracted even more foreign money. So it continued to provide cheap and ample credit, thereby fostering domestic inflation without stemming the imported inflation.

This development was made worse by the fact that the currencies of some of Germany's neighbours (French Francs and Italian Lire) were undergoing an even greater degree of inflation than the German Mark. As a result of the erroneous financial measures of excessive state expenditure and over-generous credit policies these currencies

suffered a greater fall in purchasing power than the Mark. Thus, in 1963, Germany's neighbours began to pour their weak currencies into this country, in order to buy in Germany, with the stronger purchasing power of the Mark obtained at fixed rates of exchange. True, this contributed to the expansion of German exports, but at the same time it was also responsible for an inflationary increase in the circulation of money.

Now it is not true that the Bundesbank did not attempt to contain the inflation. But the means employed were aimed at the symptoms, not the cause. The Bundesbank itself bought a large proportion of the foreign exchange on offer, retaining a part as credit balances abroad, particularly in the United States, and converting the remainder into gold. Its reserves of gold and foreign exchange soon exceeded its note circulation. To effect these purchases the central bank not only needed the bank-note presses but also forced into service the other banks, by employing the so-called minimum reserve which the banks had to deposit with the Bundesbank.

The institution of the minimum reserve appears for the first time in central banking policy in the Free Banking Act passed by the state of New York in 1838. According to this act the banks must retain a percentage of the bank-notes issued by them as well as of the amounts deposited with them as reserves. The minimum reserve thus owes its origin to the need to safeguard the client. It was never intended to be a means of regulating the circulation of money.

In the history of German currency, too, the minimum reserve had no part to play until the banking law of 1934. Naturally the Reichsbank expected that each client who enjoyed the privilege of having a transfer account with it – and that in itself was always a business recommendation – would maintain a credit balance on his account with the bank. But the reason was more a question of covering costs than one of general monetary policy. No rules about the actual level of the required credit balance were laid down. On the contrary, when in 1924 I joined the management of the Reichsbank one of the first measures was the lifting of exactly this customary obligation to maintain a credit balance. It was not until

the banking law of 1934, which was passed as an aftermath of the bank crash of July, 1931, that the banks were obliged to maintain a cash reserve. And even then it was intended only as a safeguard against losses, and thus conceived in terms of ability to pay.

In addition one must keep in mind under which political circumstances this law, to which I myself was one of the signatories, came into being. National Socialist agitation under the leadership of Gottfried Feder was directed in great fury against private banking and against the entire currency system. Nationalisation of the banks, liberation from the bondage of interest, the introduction of a state 'Feder' giro money, these were the catch phrases by which an end was to be made to our monetary and banking economy. I had to try to steer Hitler away from these destructive conceptions. I summoned the board which drafted proposals for the stiffer supervision and control of the banks. The stipulation of the cash reserve was one of these proposals. The cash reserve makes sense as a means of securing the bank's obligations where its banknotes and investments are concerned. As a means of maintaining liquidity it is by and large superfluous. There are other short-term assets capable of serving this end. The only real reserve of liquidity is the central bank with its banknote printing presses. Whether it pays out this cash reserve to a client in need of financial assistance, or whether it grants a subsidiary credit against assets as security, payment is made through the banknote printing presses. If, today, there is a fifteen milliard credit balance with the Bundesbank which belongs to the banks, then the sixty-four thousand dollar question is how it will ever be restituted.

The cash reserve was part of the Reich law on credit transactions passed on 3 December, 1934. Paragraph 16 of the law provided 'The credit institutions will retain a cash reserve which will be composed of cash in hand as well as the balance with the Reichsbank and the German postal cheque offices. The cash reserve must amount to at least a hundredth part as determined by the supervisory office of the obligations under Paragraph 11, sections IA, C, D, E, F (money on deposit, customer's current account credit balances, debit balance of nostro account, acceptance of drawn up bills of exchange,

and issue of the bank's own bills and drawn up bills insofar as these are still in circulation).

This wording clearly shows that the justification and purpose of the minimum reserve originated in the need for liquidity. It was intended as a genuine store of liquidity, and should not, as is happening today, remain blocked for years on end. It was also designed to bring all banks into close contact with the Reichsbank in order to facilitate the latter's command over the money market. The same considerations also guided the Federal committee for money and credit in 1953. Adolf Weber was asked to make a report by the plaintiff in my denazification process before the Ludwigsburg court. In this report he showed how I succeeded in bringing Hitler to his senses where questions of banking and currency were concerned. At the end of March, 1933 Hitler declared in the Reichstag 'In principle, the German government will safeguard the interests of the German people, not by means of a state-organised bureaucracy, but by means of the greatest possible furtherance of private enterprise and respect for private property'. And a little later he said to his party leaders 'It is wrong to get rid of a good economist provided he is a good economist because he is not yet a National Socialist, at least not if the National Socialist who is to take his place knows nothing about economics'.

Adolf Weber added that these expositions are in part almost word for word identical with the Fundamentals of German economic policy which I had published in the previous year. The passage in the work to which he refers reads 'In answer to the contention that economic enterprises should be managed by a bureaucracy, which is always justified by the need to achieve a just distribution of economic surpluses in pursuit of the common welfare, it must be stated as a first principle that the success of the economy depends in the first instance on the personal abilities of the individual engaged in economic activity. This applies equally to employer and employee. Only if the will to work and diligence of the individual is encouraged and kept alive can one reckon on the greatest possible success of the economy, with any success whatever. On the other hand that which is today generally and wrongly designated as socialism, and which is in

reality an irresponsible politico-economic bureaucratism not directly interested in success, must disappear from the scene if the economic success necessary before there can be any distribution is to be achieved at all'.

It was not until 1957 that the cash reserve was expressly used as a means of combating the threat of inflation. Paragraph 16 of the Bundesbank law of 26 July, 1957 reads 'In order to influence the circulation of money and the granting of credit the German Bundesbank may ask the credit institutes to deposit with it in the form of a transfer account one hundredth part of its obligations on current account (minimum reserve) cash deposits, short term investments and savings, as well as short and medium term moneys raised, excepting obligations towards other credit institutes obliged to deposit minimum reserves'.

Here, then, the use of the minimum reserve as an instrument of monetary policy is anticipated. In the preamble to the law the minimum reserve is treated as yet another instrument for manipulating the quantity of money in circulation. Even if the minimum reserve is used to reduce the quantity of money in circulation the experiences of the last few years show that it does not suffice to prevent an inflation. As a result the disadvantages of the minimum reserve have become even more apparent. It deprives the German banks of fifteen milliard DM which yield no productive results and show no profit. This missing profit must thus be made up by the banks by making their remaining services and business transactions more expensive. Drawing on the minimum reserve in a case where a single firm finds itself in difficulties is scarcely possible, because it cannot take place automatically but requires a request addressed to the Bundesbank - a procedure which would undoubtedly attract undesirable attention.

As a tool employed in monetary policy the minimum reserve is a primitive and not very ingenious instrument. Why the Bundesbank consciously and obviously used it to achieve a questionable success in combating inflation is not easy to understand. The fact that it is used in America should not make it a precedent to be imitated. 'The determination of the reserves of the commercial banks is

amongst the instruments employed by the central bank when it seeks to compensate for excessive liquidity by amassing gold and foreign exchange,' says Veit in his standard work on monetary policy. He adds immediately 'Whether such sterilisation is a failure or a success is one of the big questions of the monetary policies of our time'.

Regulation of the quantity of money in circulation is the foremost task of the central bank. Paragraph 3 of the Bundesbank law says 'The German Bundesbank, aided by the currency policy facilities provided by this law, is to regulate the circulation of money and the granting of credit to the economy with the aim of safeguarding the currency, and is to provide for the settlement of payments at home and abroad'.

If the central bank is prevented by outside influences from regulating the quantity of money in circulation, then the task entrusted to it has no meaning. Such a state of affairs actually occurred in recent history. When in 1923 the Reichsbank, in view of the colossal inflation, was no longer able to print a sufficient number of the coloured paper notes, it allowed the municipalities and a whole series of industrial undertakings to print for themselves the notes required for their monetary needs. It undertook to accept this so-called emergency money at the same value as the Reichsmark. A greater enormity is hardly imaginable. In any case, the result was that the regulation of the quantity of money in circulation slipped completely out of the Reichsbank's hands. The central bank law was to all intents and purposes put out of action.

It is regrettable that the Bundesbank did not remember these events when the introduction of convertibility at fixed rates of exchange threatened to place it in a similar position. Should I find myself subject to a contract which makes it impossible for me to carry out the terms of a basic German law, then my first step must obviously be to draw the attention of my partner in the contract to this fact and to ask for an amendment or supplementary clause to the contract. Nothing of the kind took place.

The government too resorted to a remedy by means of which it

sought to influence the imported inflation. This remedy did not originate with the Bundesbank which, I am glad to say, disagreed with it. The scientific adviser to the Federal Ministry of Economic Affairs stated in a report that the best way to damp down the overheated export market conditions and the imported inflation linked with it was to alter the value of the German Mark. The Deutschmark should be revalued. Accordingly in March, 1961 the Mark was revalued by five per cent. Experience has shown that the revaluation did not affect the export imbalance and did not alleviate the imported inflation. The remedy of revaluation proved ineffective. It was also basically wrong.

It must be clearly understood that the national economy of a country which takes part in world trade is linked with its clients abroad by a great number of contracts covering delivery, orders and other commercial agreements. A large proportion of these agreements is concluded in terms of the home currency, and thus in the case of Germany, in German currency. If one now legally changes this currency, then all contracts with countries abroad are affected. A purchaser who ordered a machine plant in Germany in February, 1966 and expected to pay a price of one million DM in dollars, had by March to find an extra five per cent in dollars because of the revaluation of the Mark. Such a procedure could only be regarded as a deliberate fraud. Another remedy which the government employed, this time with the accord of the Bundesbank, is no more commendable morally. The interest coupons of German securities in the hands of foreigners were, by a law passed on 28 June, 1965 encumbered with a twenty-five per cent coupon tax. A foreigner who bought on the market a government security yielding six per cent now obtains four and a half per cent interest instead of six per cent. It is ineviable that he should feel himself cheated by such a procedure.

Moral behaviour is just as essential in business and commerce as it is in politics. Insolvency is encountered often enough, but reproaches for such a state of affairs are justified only where it has been deliberately brought about. In my denazification process in Ludwigsburg, the disappointment of American subscribers to

German loans was naturally also mentioned, because the payments due on these loans were suspended during my term of office with the Reichsbank. But when the American expert Professor Palyi was asked whether any blame attached to me in this regard he answered 'by no means'.

Twice Germany has experienced an end to inflation. Both times it was accompanied by a transformation in fortunes and financial assets which hit all classes of society but bore hardest on the less well endowed. Both times vain attempts were made to make at least partial amends for the injustices of inflation. After 1924 all mortgage and similar claims were up-valued by a large percentage. I then argued that the degree of the upward valuation should be determined by social considerations, not by strictly legalistic ones. I was of the opinion that the less-well-off should be given more consideration than the well-to-do who were not so badly affected by the fall in values. Government and parliament did not share my views. All were treated equally in strict accordance with the legal character of their claims.

After 1945 some compensation was granted under the Equalisation of Burdens Act, once again without making the social circumstances the determining factor. As today we are coming to the end of the third inflation, it must be noted that so far this inflation has not brought about a transformation in fortunes and financial assets to a degree where compensation for those affected has become essential. When the inflation has been brought to an end everyone will have to be content with the fact that it has not gone further. It is impossible to bring the Mark back to its former purchasing power. The only remaining hope is that the authorities will pursue a taxation policy which affects those who gained from the inflation more than those who lost as a result.

In general, experience has confirmed the rule that an arbitrary upward valuation of a currency has just as little lasting effect on the purchasing power of money as a devaluation. The idea that fluctuating changes in currency can be used as an instrument of economic policy is erroneous. The basic assumption behind every economic policy, particularly where international trade is concerned, is stable currency which enables everyone to plan ahead beyond the immediate moment. The recommendations aimed at alleviating the inflation which originated in mistaken domestic policies are legion. They can, however, be concentrated into two basic rules: public expenditure must not be financed by means of the money-printing presses, and short-term bank funds must not be used for long-term investments. All long-term investments must be financed by the capital market, that is, out of savings. All public expenditure must be defrayed out of taxes or loans.

In recent decades the German authorities have grievously offended against these basic rules. To a large extent public expenditure has been financed by printing more notes. And the loan banks have sanctioned far too great a volume of investment with short-term money, thereby injuring their liquidity. A look into the Deutsche Bundesbank's balance sheet for 1964 gives us an illustration of this. Amongst the bank's assets we find (in round figures):

loans to the Federal Government for foreign interests	3 Milliard DM
other claims on the Federal Government	3 Milliard DM
World Bank and International Monetary Fund	2 Milliard DM

These assets to a value of 8 milliard are illiquid. Should Germany be overtaken by a general crisis they would be inaccessible. The central bank is in no position to help in such an instance, because it cannot render these interests, investments and government credits liquid. Two other kinds of assets would also be unrealisable in these circumstances:

gold		San A	17 Milliard
foreign exchange			11 Milliards

Both items could not be converted into German Marks, should the German economy find itself overtaken by a financial crisis, because in such a case no German would have the money to buy gold and foreign exchange and no foreigner can pay with German Marks, but only with foreign exchange. If we look at the other side of the Bundesbank balance sheet we find the assets balanced by the following liabilities:

obligations towards banks
(minimum reserve)

obligations towards others

obligations towards others

3 Milliard DM

rote circulation

27 Milliard DM

Thus obligations to a value of 45 milliards are balanced by 36 milliards in illiquid assets (the equalisation claims against the public sector are not taken into account here, they are also illiquid, but arose unavoidably out of the currency operations undertaken in 1948).

The question which must be asked is by what means the Bundesbank would pay out their credit balances to the banks should this prove necessary? The only way would be to resort to the noteprinting presses, and thus further inflation. Yet another question is even more to the point: by what means did the Bundesbank pay for the 17 milliards of gold and the 11 milliards of foreign exchange? Having made 8 milliards over to the Federal government on long-term loan, and having purchased gold and foreign exchange to a value of 28 milliards, making an outlay of 36 milliards, one can only conclude that a large part of the deposits by the banks for their minimum reserves obligation were employed for the purchase of gold and foreign exchange. The Bundesbank has put the credit balances belonging to its banking clients into unmarketable illiquid assets (unsaleable gold and foreign exchange). However, this has not stopped the Bundesbank from calling this credit balance belonging to the banks a reserve. But surely a reserve means that these credit balances should be immediately accessible in c ase of a crisis.

This rather rough calculation, which leaves out of consideration a number of smaller items, serves to make one thing clear: hoarding gold and foreign exchange is not a good preparation for the contingency of an internal financial crisis in Germany.

Most attempts to deny that we are today in the middle of an inflation appeal for justification to the various price indices. It is pointed out that large price fluctuations have from time to time also taken place at times when there was no inflation. Reference is made to the fact that improvements in the general standard of living are associated with general rises in the price level. This however only proves that price-rises on their own need not be an indication of inflation. If there is a quantitative or qualitative rise in the consumption of goods – and this is what a rise in the standard of living means – then prices rise too. More valuable raw materials are used, more working hours are employed in the manufacture of a commodity. Both are a natural cause of a rise in costs, and thus also effect higher prices.

This kind of attempt to prove the non-existence of inflation ignores the basic character of a monetary economy. Money is a means of exchange, money moves commodities, money enables consumer goods to change hands. All other qualities of money are secondary. Therefore the relation of the quantity of money to the quantity of goods, which superficial critics take pleasure in deriding as naïve, has a key significance.

In its annual report for 1927 the Reichsbank formulated these principles admirably: 'A great increase in the circulation of the means of payment, even if fully covered by gold, must have a deleterious effect on price-formation. This effect gives the appearance of being graver than it is, since price rises, even if they have quite natural causes from the goods side and in production costs, are, as experience shows, interpreted as signs of inflation by large sections of the population. The cover principle must not and cannot therefore serve as the sole criterion for the Reichsbank, because otherwise the economy would by the roundabout route of price- and wage-rises arrive at false conceptions of profitability and be misled into

wrong use of investment and business activity. The circulation of the means of payment of a country must be maintained in a balanced relationship with the level of economic activity. It can without detriment be higher in times of lively economic activity than in quiet times.'

In my doctorate thesis of 1900 in which I discussed the English mercantilists, I had established that these authors already knew how to distinguish precisely between price-rises due to normal economic development, and price-rises due to an excessive quantity of money. John Hales (1549) nominates 'the plenitude of money which in our time flows into our country to a far greater extent than our fore-fathers ever experienced' as a cause of price-rises additional to the usual factors. At this time money consisted of precious metals, and experienced an enormous increase in volume as a result of the booty of silver and gold obtained from the Americas. Other writers treated in my thesis represent the view that a definite relationship between the quantity of money and the turnover of goods must be maintained. It was recognised 'that the demand for money is determined by the maximum amount of periodically-recurring payments'.

Thomas Mun (1630) expressed the fear that the quantity of money circulating in a country might grow to such an extent, and bring about such a rise in the price of all goods, that exports would suffer. The conceptions of the English Mercantilists thus clearly signify that an increase in the quantity of money effects a rise in all prices. The dangers of inflation were already recognised four hundred years ago.

It is the task of the central bank to make as much money available as is needed for the exchange of goods. For this reason all laws and acts relating to the central currency bank have made the commercial bill the fundamental element of central bank policies. The commercial bill indicates the turnover, the part-completed exchange of a commodity. If the central bank grants credit against a commercial bill there is no danger of unleashing inflation. All other types of credit require most careful examination and consideration.

People have often wondered why the large credit operation of the 'thirties did not unleash inflation. Superficial and malevolent critics were always on the look out for the 'trick' behind it all. But the secret of the MEFO operation consisted simply and solely in the observance of the basic principle of monetary policy. Credit was granted against bills of exchange, the MEFO bills, which meant that each issue of money was based on a commodity transaction. Money was not issued for each and every expenditure, but only if the amount of money was equivalent to an amount of goods which was vouched for and transferred by means of the bill. The assets of the Reichsbank consisted of commercial bills and of nothing else. Other assets, bank bills or credits played no part.

And now to look again at the balance sheet of the Bundesbank. 17 milliards in gold and 8 milliards in claims against the public sector do not reflect a turnover of goods. They contradict the fundamental character of money. They are inflationary. Nor can price indices do anything to change this state of affairs.

Official spokesmen always refer with great satisfaction to the growth in the amounts saved by the population of Germany. These savings are certainly gratifying, even if their expressions in inflated figures always belies their actual value. Less gratifying is the way in which these savings are invested. In times of peace such savings capital was largely invested in debentures issued by the public sector and by industry. Today such savings are largely gathered into the great money institutions, the Giro accounts, banks, insurances, etc. People have no faith in the long-term investment of money. The cause for this lack of faith must be sought firstly and principally in the constant inflationary reduction in the value of money.

The Bundesbank's policy of cheap credit, adhered to throughout the boom period, has contributed to the bad state of the money market.

A country which after war and inflation had been brought to an unprecedented state of poverty, needed high interest rates in order to encourage saving. Already twice since the collapse of 1945 the attempt to maintain the low rates of interest prevailing on the capital market has failed – in 1956 and in 1965. These mistaken attempts also account for the failure to check inflation. If a proportion of savings had at the right time been directed into long-term investment in securities, there would have been little or no need to put milliards into a minimum reserve.

On this point too the Bundesbank could have found a precedent in its own history. When in 1939 signs of an impending inflation began to appear the Reichsbank adopted a drastic investment policy. In 1938 it issued no less than three Reich loans. They had the following result:

1st loan: original amount issued 1,000 million Marks. Due to heavy oversubscription increased to 1,200 million Marks. Subsequently a further 200 million were placed.

2nd loan: original amount issued 1,000 million. Increased to 1,600 million, owing to heavy oversubscription. Subsequently a further 366 million were sold.

3rd loan: original amount 1,500 million. Raised by 350 million.

Thus in the course of one year a total amount of 5.2 milliard. Marks was taken off the market through Reich loans. In an essay entitled 'The Financing of Rearmament in the Third Reich' Dr Henry Stuebel wrote the following about the 1938 loan policy: 'In issuing the loans the Reich was independent of the populace's will to invest. It is true that a Reich loan consortium came into existence. Yet the large part of the loans was disposed of "without friction" and "in the normal course of events" i.e. monies which had been collected by the mutual loan societies, the savings banks, the insurance companies, the post office savings banks and the social insurance fund were skimmed off by the Reich and converted into the national debt'.

This account is incorrect. The fact is that the entire amount of the first loan, 1.2 milliards of the second loan and 1.25 milliards of the third loan were placed by the Reich loan consortium by public subscription. In addition to that publicly subscribed, 400 million

Marks of the second and 550 million Marks of the third loan were firmly placed. All three loans were proclaimed publicly in all the important papers by means of prospectuses and invitations to subscribe. Stuebel's account is a typical example of the way in which political prejudice can colour and distort the statement of the true facts and the verdict of history. Stuebel accompanies his account of 'frictionless' placing and 'in the normal course of events' with the sentence 'thereby the majority of the German population – for the most part probably without realising it – became direct creditors of the Reich'.

Does Stuebel think that the mutual loan societies, savings banks, insurance companies and social insurance funds do not today also invest the monies collected by them in Government loans? Does Stuebel not believe that today too loans are placed without friction? Does Stuebel think that savers have only now come to the realisation that they become the state's direct creditors should their credit institutions acquire Federal Loans?

I am only too pleased to concede that a parliamentary government has a harder time of it financially speaking than an authoritarian regime. But in our time too it should be possible for the government and the Bundesbank to manage things in such a way that the threat of internal inflationary policies can be countered by a revitalisation of the security market. Naturally in an impoverished country this is possible only if higher rates of interest are offered.

Other means must be used to combat imported inflation. In the winter of 1964-65 I took some steps to stimulate this. In doing so I did not suggest anything which would injure the contractual obligations which Germany was bound to honour by international agreement. In particular I rejected the suggestion contained in the aforementioned report by five experts, that a flexible exchange rate should be adopted. This would have been an affront to Germany's trading partners. Nor did I entertain the retrospective affront to foreign buyers of German securities, which was perpetrated by the coupon tax law.

My proposal attacks the imported inflation on the German money

and capital market, not on the foreign one. This proposal recommends that the foreign exchange on offer should indeed be changed into Deutschmarks but that their use at home should be blocked and only their re-use abroad should be sanctioned. Which of the foreign exchange receipts should be subject to these measures would be a matter for careful consideration. It would be necessary to grant substantial exemption to receipts from the export of goods. But foreign credits, and proceeds from the sale of internal investments, bonds, etc. to foreigners are a rich field for restrictions at home and reinvestment abroad.

Two objections to my proposal were advanced. The first was that such a measure harked back to the different sorts of Mark of the 'thirties which still rankled in the memory. This objection is based on a misjudgement of the procedures of those days. The bank crash of 1931 had the moratorium on foreign payments, the deferment agreements and the economy subject to exchange control as its consequences. As a result Mark balances belonging to foreign creditors accumulated in the foreign exchange clearing office created for this purpose, balances which could not be transferred in foreign currency.

When I resumed my duties as president of the Reichsbank in 1933, I offered foreign creditors a variety of ways in which they could use their Mark balances should they wish to do so as a means of avoiding the unforeseeably long delay until the blocked Marks could be transferred. I exercised no kind of compulsion, but left it entirely to their free choice whether they wanted to wait for Mark transfers to become possible, or sell their Mark claims at a discount insofar as they could or would not utilise them within Germany. Many foreigners availed themselves of this alternative, particularly those who regarded an immediate transfer of Marks surer or preferable to a long wait or those who could undertake profitable ventures with money immediately available.

My current suggestion too does not exert any compulsion over the foreigner, indeed it leaves him completely untouched. The question is whether it exerts any compulsion over nationals of this country. Surely no more than today when his cash is blocked for year after

year as part of the minimum reserve? No, the constraint imposed upon him by my suggestions is considerably smaller. For he can do nothing whatever with the money locked up in the minimum reserve, while he can put the 'foreign Mark' to use abroad. Yet the 'foreign Mark' would do more to relieve the inflationary pressure than the present day minimum reserve. Fifteen milliard blocked external Marks would have a greater anti-inflationary effect than fifteen milliard blocked inland Marks.

The second objection to my proposal is that a restriction on the use of the Mark contravenes the basic principle of the free market economy. Now the free market economy is something about which one should no longer make such a fuss, particularly if one remembers the many subsidies which the state grants to countless branches of the economy, the many kinds of cartel which are allowed, the many privileges in business transactions, credit grants, exemptions, etc. which exist in the financial sphere. Our free market economy was not leakproof from the very beginning and it is now riddled with holes. And it is quite impossible to allow inflation to be offered up as a sacrifice on the altar of the imaginary god of the free market economy.

My first suggestion is of course intended for application only should the imported inflation, which at the time of writing has abated, recur. It will continue to be a threat so long as the unrestricted conversion of foreign exchange into Deutschmarks remains possible. No one thought of this threat when agreement about unlimited convertibility was reached with the International Monetary Fund. Yet if, as it has subsequently turned out, this contractual obligation prevents the implementation of a basic German law, which is what the Bundesbank law is, then those at home and abroad must reconcile themselves to any German measure which can remedy this state of affairs without formally injuring the agreement.

A further recommendation which I made concerned the utilisation of the Bundesbank's foreign exchange reserves to finance the needs of foreign trade. The basic idea behind this recommendation is that the credits which the banks now grant to industry for the purchase

of foreign raw materials should in future be granted by the central bank.

Let us assume that at present the German banks have given credits in respect of such raw materials to a value of 8 milliard DM and that they charge 7 or 8 per cent interest. At the same time the Bundesbank holds 10 or more milliards DM in dollars deposited with the American banks, and obtains a rate of interest averaging two per cent at the most. The American banks use this money to promote the American economy. Why does the Bundesbank not use its dollar assets to grant the eight milliards in credit required for the purchase of raw materials by German industry? In this way it could reduce the cost of credit to German industry by several per cent, relieve the German banks of the burden of such credit, and use the money thus set free to increase the liquidity of the German banks should this prove necessary.

A third proposal dealt with the slowing down of state expenditure on so-called development aid. This will be dealt with in the thirteenth chapter. Both the foregoing proposals were only roughly sketched in by me. They require detailed working out and organic amplification. They can be adapted in many ways and have innumerable applications. And they are not the only possibilities; they merely serve as examples.

The future will provide us with many more challenges which will require us to co-operate in finding new solutions. However, an attack in the full glare of publicity must be launched against a currency policy giving itself over to the blandishments of inflation and bringing about a transitory economic flowering with overconsumption, luxury and dissipation, which cannot last forever because it is conducted not through saved capital, but by continuously devaluing money.

Inflation is not respectable as an instrument of currency policy. This was said as long ago as 1951 by the well-known Frankfurt banker and economist Albert Hahn. He calls inflation a crime. In February, 1962, Dr Wesemann said in a broadcast 'It is beyond question that from the social point of view an inflation is the worst crime of which a state may make itself culpable'. Professor Richard

Gaettens concludes his book on inflation with the words 'Inflations are the worst offences against one of the fundamental rights of man, against private property'.

The first president of the Deutschen Bundesbank, the privy councillor, Vocke, summed up his deliberations as follows 'It remains true that inflation, the unjustest and most anti-social of all procedures, is basically self-deception and swindle'.

I was prompted to look for the cause of the excitement of certain public men created by my warnings in the magazine article, and to investigate why people denied that I had any knowledge of currency policy and any understanding of it at all. If even an expert critic like Muthesius, the editor of the Zeitschrift für das gesamte Kreditwesen - who expressly referred to the fact that he had lived through the 'twenties and 'thirties, and had studied the policies pursued by the Reichsbank during this period - does not know that the depletion of the Reichsbank's gold funds and the introduction of exchange control occurred not in my period of office but in that of my successor, then one can safely assume that younger critics have even less idea what happened in the 'twenties and 'thirties in the field of monetary policy. I therefore asked one of the younger generation of economic journalists to paraphrase his views on this period. Here is the result. 'The question which the young generation wishes to put to the president of the Reichsbank is why he did not stop the completely incomprehensible short-term foreign indebtedness which developed in the 'twenties by means in accord with free market principles, and why deficit expenditure was not restricted when in 1936 it became obvious that deflation was changing to price inflation, and full employment had been achieved. At this time the political significance attached to the office of president of the Reichsbank was still such that he could not easily be dismissed summarily, while the Reichsbank could not be robbed of its autonomy?'

To answer this question I must first summarise the policies which the Reichsbank pursued at this time. It must be mentioned at once that between 1924 and 1930 the Reichsbank had a general council with seven foreign members in addition to seven Germans. These were forced upon the Reichsbank by the Dawes plan. Thus all measures taken and all deeds performed by the Reichsbank were controlled from abroad. Each of the seven strangers represented a foreign country: the United States, England, France, Italy, Belgium, Holland and Switzerland. Quite naturally it was part of each member's task to see to it that nothing was done which might injure the interests of his country. Now it is true, as I would unhesitatingly certify, that the foreign gentlemen all did their best to collaborate with the directorate of the Reichsbank in an objective way; but they had been seconded to the Reichsbank under political auspices, and were obliged to devote a good deal of their attention to seeing to it that the Dawes plan ran smoothly for as long as possible.

To them too it was clear that it was not possible to defray the Dawes payments principally out of export surpluses so that they could be effected only by means of foreign credit. But they hoped for a favourable development in later years which would make up for the initial deficit. It says quite a lot that none of them raised any objection when the Reichsbank pointed out that export proceeds and reparations obligations were quite out of proportion.

The Reichsbank did all it could to drum this lesson home, and also repeated it quite unambiguously in its annual reports. Its appeals were addressed not to the general public, but to the authorities of the Reich, the provinces, and the municipalities. Its annual reports were sent to foreign central banks and finance ministries. It also urged repeatedly that the German government in particular should extend the powers of the advisory office, suggesting that it should be given the right to veto any acceptance of foreign loans, and not merely restricted to an advisory capacity. All German governments of the 'twenties ignored these urgent promptings by the Reichsbank.

It is surprising that the foreign members of the general council did not oppose or suppress the Reichsbank's annual reports containing passages such as that from the annual report for 1926: 'Where the foreign credits are concerned, the Reichsbank found it necessary during the period covered by this report just as in the previous year

to warn very seriously against the regularity and extent to which foreign debts were being contracted and to do everything which could be done, without injuring legitimate German economic interests, to prevent an exaggerated and premature resort to foreign credit markets. Altogether during the year covered by this report German loans to a nominal value of nearly one and three quarter milliard Reichsmarks were raised abroad (as against some one and a quarter milliards in 1925). The share of public loans – for the 'Länder' (Federal States) and municipalities as well as those enjoying state or municipal guarantees – took up some 600 million of this amount'.

The Reichsbank added the following political warning to this cold statement of the facts of monetary policy 'Quite apart from the grave consequences for monetary and economic policy, the excessive incurring of foreign debts also has an effect on reparations policy. Foreign exchange for transfers derived solely from foreign credits cannot be regarded as the proceeds of an economic surplus resulting from the industrial enterprise of our country, which the Dawes plan makes a pre-condition for effecting reparations payments'.

The annual report for 1928 says inter alia 'Despite such and similar measures designed to promote export, it was impossible in the face of the prevailing intransigent protectionism on the part of foreign countries to overcome the adverse German balance of trade, and to achieve the substantial increase in exports which is so essential from the point of view of reparations policy... once again in the course of the entire year reparations were paid, not out of surpluses earned by the economy, but by means of borrowed monies. And once again the question presents itself, how long can this process of incurring debt continue and to what extent can the German economy still be expected to carry on under the prevailing credit conditions, which have become progressively worse in the course of the year?'

The Dawes plan came into operation towards the end of 1924. As early as 1925, and then in every subsequent year, the Reichsbank warned in its official annual reports that excessive foreign credit

was dangerous. A further passage in the annual report for 1928 is still more explicit 'Even more urgent and important is the need to establish whether this foreign indebtedness makes and will make a contribution to effecting a German export surplus sufficiently large to make interest payments (already amounting to some one milliard Reichsmarks) on the foreign loans raised so far, as well as the annuity payments due on the Dawes plan possible... To date, the transfer of the annuity payments due on the Dawes plan has been made possible only by the credits raised abroad. Since the four-year trial period is now over, it will be necessary to make a thorough investigation into the question whether, in view of the stipulations of the Dawes plan, whereby in the long run a transfer can be made only out of balance of payments surpluses, it is permissible to continue making transfers with borrowed monies'.

If, despite all this, the German governments still exhibited reluctance when faced with the question whether or not foreign credits should be vetoed, then the reason was the pressing desire not to prejudice the efforts made to free the Rhineland. The ending of the military occupation of the Rhineland was the great political aim to which all economic considerations were subordinated. The Reichsbank too was unable to remain aloof from this political aim. In the spring of 1929 the Young committee began its deliberations in Paris. Freeing of the Rhineland depended on their result. It is true that Germany's opponents were beginning to realise that power politics would not lead to financial success, but at this point in time Germany still had to accept the fact that the liberation of the Rhineland could not be achieved without financial sacrifices. The Young plan, as formulated by the experts, was signed. The Rhineland was freed.

During these discussions the Reichsbank's hands were even more tightly tied by politics than before. This was just as true for the short-term foreign credits as for the long-term loans. But even had these decisive considerations not been in evidence, the Reichsbank would still have had to take an unusual attitude towards the short-term credits. Short-term credits in general are raised only for current deals, foreign credits in particular mainly to finance import

and export trade. Short-term foreign debts are counter-balanced by short-term foreign claims. Short-term foreign credits become grave in their consequences only if they are used for home investments.

When in the autumn of 1927 it emerged that a number of banks were using short-term foreign credits to finance stock exchange speculation, the Reichsbank intervened with great success. I have already mentioned 'Black Friday'.

Had the Reichsbank intervened in the granting of credit for foreign trade, it would have delivered a body blow to the German economy in just that area in which there was some hope of a solution to its problems – the field of exports. Germany had undertaken to do everything possible to promote its own exports. A restriction on credit for foreign trade would have been regarded as sabotage, and could conceivably have prevented a political solution.

With the New York stock exchange crash of October, 1929, the granting of long-term credits to Germany came to a sudden end. Short-term credits continued to be negotiated because they are a regular part of foreign trade, and quite indispensable. My departure from the office of Reichsbank president at the end of March, 1930, did nothing to alter this state of affairs, because foreign trade simply cannot do without such credits. I am unable to say from personal knowledge whether after my departure foreign credits were misused, or raised to an excessive extent. But after the banking crisis of July, 1931, an understanding was soon reached with the foreign banks whereby short-term credits were governed by the so-called standstill agreements. The Reichsbank report for 1932 tells us that "The short-term indebtedness incurred by the banks and the rest of German economy with foreign banking creditors, insofar as these obligations come under the German credit agreement of 1933, still amount to some 4 milliard RM'.

It was not the short-term foreign credits which made the situation in the 'twenties so grave. No, the seriousness was in the volume of the long-term loans. Repayment of capital and interest on the short-term credits was taken into account when the terms of foreign business transactions were agreed. The transactions financed by such credits brought in foreign currency. The long-term loans, on the other hand, disappeared into thin air, their proceeds swallowed up in home investments or in reparation payments.

The second question, why deficit expenditure was not restricted when in 1936 it became obvious that deflation was giving way to price inflation, and full employment had been achieved, betrays an erroneous conception of political realities which goes even beyond an inadequate knowledge of conditions in the 'twenties. If this question is based on the proposition that 'at this time the political influence attached to the office of president of the Reichsbank was still such that he could not easily be dismissed summarily while the Reichsbank could not be robbed of its autonomy' then one must ask oneself what kind of historical knowledge is imparted to our young generation at the universities. Already, prior to 1936, Hitler had dismissed other august persons from their offices, and deprived organisations quite different from the Reichsbank of their autonomy. In the literature of the history of our time we are constantly told how totalitarian power was misused at that time, and here all of a sudden we are asked to believe that Hitler would have called a halt when faced with the Reichsbank and its president!

During my last visit to Chicago I was interviewed on a television programme. Referring to Hochhuth's *The Representative*, the interviewer asked me what effect a protest by the Pope against the persecution of the Jews would have had on Hitler. I replied 'None whatsoever. The only reason why Hitler did not dismiss me and deprive the Reichsbank of its autonomy earlier was because he still believed that he could persuade the directorate of the Reichsbank to his point of view. When he saw there was no hope of this happening, he did not hesitate for a moment.' Nonetheless, the Reichsbank still took action to the extent to which it remained in its power to do so. It could not restrict the deficit expenditure, but it could demonstrate to Hitler that the income and savings of the German people did not suffice to carry out his wishes. If in 1938 the Reichsbank invited the public to subscribe to a series of three loan

issues totalling milliards of Marks, and if one half of the last of these loans was left on the bank's hands, then perhaps Hitler could be persuaded by this result to restrict his expenditure on armaments. This aim and intention lay behind the Reichsbank's loan procedure. The attempt failed. Hitler had chosen inflation and damn the consequences.

It was a sheer miracle that the Reichsbank was able to preserve its independence for six years, and that it was able to pursue sensible monetary and currency policies under a brutal totalitarian regime. Even so, the Reichsbank would have been quite unable to restrain the deficit expenditure of a dictator. Let us hope that in our democracy with its understanding of the rules of a market economy the Bundesbank will be able to check excessive state expenditure.

The Dawes plan introduced in 1924 signified a sensational breakthrough towards solving the problem of how large sums of money could be transferred from one country to another. Arbitrary despoliation was to be replaced by the proceeds from export surpluses and from services rendered. The Young plan of 1930 effected a few numerical reductions, but fortunately did nothing to change the basic idea. This economically-sound solution failed, because the victorious powers who bought the greater part of Germany's exports were not prepared to buy more goods from Germany than they had done hitherto. Germany was not only an unwanted supplier of goods to their own home market, it was also a competitor in the rest of the world. Was anyone going to accept a deliberate strengthening of this competition? Germany would have been very happy to increase its exports, but to achieve this end the world market would have had to be opened to its goods. No one was prepared to grant Germany this facility.

There was only one way out of this dilemma. New markets for German exports had to be opened up. The world has quite enough under-developed or undeveloped countries, countries which have every desire to raise their living standards with the help of the highly industrialised states. Today such countries are summed up in the term 'under-developed countries'. The greater part of Asia, nearly the whole of Africa and Latin America fall into this category. Their need for industrial products is gigantic, and they can pay with raw materials and agricultural produce. It would have been simple to develop these markets to a greater degree than had been

done hitherto. If Germany had been allowed to participate in such a development, it would have been possible to realise a profit which could have been used to pay the reparation claims made by the victors. Such was the simple and illuminating idea which I put to the chairman of the Young committee. 'Owen D. Young adopted it enthusiastically. I explained that it would be necessary to invest money before such new markets could be opened up. Germany, which had been bled dry, could not raise such money, and here too the victors would have to give their help. While the economist Owen D. Young - he was president of the General Electric Company understood this idea immediately and was all for its realisation, the politicians, especially the French, were hesitant to the point of refusal. I proposed that an international bank should be founded for the purpose of raising the necessary capital. In accordance with the Young plan such a bank was indeed started in Basel. Its function was to raise loans on the international capital markets and to finance the underdeveloped countries out of the proceeds. This task was incorporated into the Young plan in the following words 'Since the transfer of payment in foreign currencies is conditional not only upon import restrictions, but also upon the expansion of German exports, we examined the possibility of creating a financial institution able to contribute to an expansion in world trade by undertaking the financing of enterprises - particularly in the under-developed countries - which would probably not otherwise be embarked upon with the normally-available financial means'. Owen Young said to me 'You gave me the idea, and I shall sell it to the world'. But he was unable to sell it to the world. The French were not in the market. For twenty years the idea lay fallow with the International Bank in Basel. In 1950 it was once more taken up by President Truman. In his inaugural speech in January, 1949, Truman announced the socalled four point programme:

... We must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas . . . I believe that we should make available to peace-loving peoples the benefits of our

store of technical knowledge in order to help them realise their aspirations for a better life. And, in co-operation with other nations, we should foster capital investment in areas needing development . . . This should be a co-operative enterprise . . . With the co-operation of business, private capital, agriculture and labour in this country, this program can greatly increase the industrial activity in other nations and can raise substantially their standards of living . . . All countries, including our own, will greatly benefit from a constructive program for the better use of the world's human and natural resources. Experience shows that our commerce with other countries expands as they progress industrially and economically . . .

This was the same train of thought which Owen D. Young and I had formulated twenty years earlier. This time the idea was 'sold to the world'. Particularly the artificial, newly-constructed and democratised states, released from Western tutelage and guidance, hitched their hopes to Truman's four point programme, borne aloft by so many noble motives. But the fact that they too would have to contribute to the better use of the world's resources did not immediately come home to them, they simply looked forward to the higher standard of living. Next Truman sold the idea to his own country, which participated with massive state aid. Subsequently, through the good offices of the World Bank and its daughter organisations, the European industrial countries, including Germany, participated financially and technically in North America's development aid programme. In the last decade many milliards have flowed into the under-developed countries, partly as gifts, partly as loans. If success has not been complete the cause lies in an essential difference between the Young plan and the Truman plan.

The idea of the Young plan was based solely on economic considerations. Its extent was determined by the financing possibilities offered by the international money markets, that is, by the amount of private capital available for investment. But the development aid of the four point plan is based on the state's monetary resources. Its extent is determined by political aims and decisions. It is not the industrialist, nor the private saver, who determines what and how much to invest in foreign undertakings, and whether and

how far to take part in the task of opening up the under-developed countries. The aim and scope of development enterprises is fixed by government agencies. They determine where and how much money is to be applied. And this money is not raised on the capital market but originates in the means at the disposal of the state household and the banking credit apparatus. While after the First World War it slowly dawned on those concerned that the reparations problem must be transferred from the political to the economic plane, after the Second World War an economic problem was shifted into the political sphere.

This is at its most evident when one listens to the official statements made by leading North-American politicians about the development problem. At first the view prevailed that the development aid programme must serve to encourage private investment in the under-developed countries. Initially, provision of technical assistance by the state and investment guarantees for private enterprise were in the forefront. In 1962 Senator Passman recommended in Congress a close collaboration between German and American industrial groups in the joint prosecution of trading projects in the development countries. Senator Capehart urged that at least half of the aid granted to a nation should be undertaken by private industrial concerns. Next to this emphasis on development projects to be carried out by private industry, another noteworthy point of view emerged. In a memorandum prepared for President Kennedy in the autumn of 1962 Chester Bowles stated as a basic principle that development aid must not be mixed up with political motives.

But in the following year sounds of quite a different kind were already being heard. In the so-called Clay report purely political considerations came to the fore. There we read inter alia 'Aid to border countries on the periphery of the communist block is most clearly in the interests of the United States. India and Pakistan must be helped, in order to preserve the balance of power in Asia with China. Indonesia should be helped only if it renounces international adventures. Economic aid to Greece and Turkey must be undertaken principally by the other NATO powers'. In April, 1963,

General Clay pointed out to Congress emphatically that foreign aid, properly formulated and carried out, is an important tool in the armoury of American foreign politics.

This political overshadowing of development aid has made a considerable contribution to the mistrust which is felt in many of the countries in need of aid towards the kind of help offered. Instead of thankfulness and collaboration in mutual trust, dissatisfaction and suspicion has manifested itself in many quarters. The contrast with the way in which the Young plan was formulated is apparent to all. It can be seen not only in the political aspect of aid, but also from the financial and monetary point of view. But it goes even deeper. It touches the principles of our life in society. The question is whether individual or collective initiative should determine our social and economic behaviour. The points of conflict between the East and the West - between capitalism and communism as it is commonly, but falsely, put - are unfortunately accentuated when they are mixed up with nationalistic political aspirations. In a discussion which I once had with a very anti-communist Eastern politician in Tokyo I asked 'What do you really mean by communism?' He replied 'Communism seeks to dominate the world'. Yet when I inquired whether he meant Russian or Chinese communism he maintained an embarrassed silence.

We have two kinds of problem: national and social. The second has an elemental priority. The contrast between rich and poor must be made less pronounced. Once this has been achieved, national problems will also be easier to solve. Yet the solution of the social problem depends on the proceeds derived from the economy. Before anything can be distributed it must first be produced. Thus the question which today splits the world in two asks which is the more successful in promoting economic activity – the individual or the public authority.

The cool process of collectivisation has already gone a long way. There is hardly a single large overseas business transaction which can be carried out without the collaboration and consent of the authorities. Perhaps it would be a good thing if from time to time we

recalled the speech made in March, 1933, in the Reichstag which I quoted earlier 'In principle the German government will safeguard the interests of the German people, not by means of a state-organised bureaucracy, but by means of the greatest possible furtherance of private enterprise and respect for private property'.

Today, it is not the productive yield expected from a development project which determines whether and how much money should be, can be, or can be permitted to be invested in it. Instead these questions are determined by a consortium of politicians or officials, by a public authority, or by a parliament. But things used to be different. Even before the two world wars there was development aid. Before 1914, too, the United States, Great Britain, France, Germany, Holland, Belgium, Switzerland and other countries devoted many milliards to the economic and technical development of countries overseas. These sums did not come from state sources, their volume was not determined by parliament or the authorities. Such sums came voluntarily out of the savings funds on offer on the private capital market.

The stock exchange lists of the great international bourses quoted a large selection of bonds and shares from overseas. Less-developed national economies financed themselves by the sale of such securities. Today it is extremely rare for similar securities to appear on the market. Our present-day development aid is not an object for consideration and speculation by bankers, businessmen or industrialists. Apart from a few exceptions, it is subject to political considerations.

In view of Germany's political weakness, it goes without saying that the setting of aims is to some considerable degree subservient to the wishes, if not the pressure, of the victorious powers, particularly the United States. Impoverished Germany is second only to the United States in granting development aid. The fact that the balance of payments has been favourable for a number of years, and that considerable gold and foreign exchange reserves have been amassed by the Bundesbank, have contributed their encouragement to the claims made on Germany. But no one bears in mind that in addition to losing its colonies, Germany has lost

foreign assets worth 30 milliard gold Marks, while the victorious powers have enriched themselves.

The constant tapping of financial resources by the public funds and the credit apparatus in order to provide development aid has made a considerable contribution to inflation. Development aid is paid for not by savings, but by a continuous increase in the circulation of money. Rich countries can afford to give presents and grant cheap credit to under-developed countries out of their savings and accumulated assets. Germany is not in a position to follow suit. All that Germany can do without injury to itself is to build up enterprises abroad from which it can expect income. But the individuals who risk their savings in such ventures must be permitted to make their own decisions. Such decisions cannot be left to an official body. To what extent, for what purpose, and whether the state should use the money which it has gathered in taxes for the development of new countries, is a political question. Where such financing is accompanied by a progressive inflation, as is actually the case in Germany today, the answer must in all events be no.

The misery which two world wars have brought to mankind is enormous. But the disturbances which are the aftermath of these two wars are hardly better. Involvement in world war also showed the less-developed countries how backward they were in comparison with the civilisation of the West. They have utilised this realisation to make far-reaching claims on the victorious powers, and they have succeeded in making a mark on the bad consciences of these victorious powers, which now seek in feverish haste to make good the omissions of previous years.

It is a bad error to suppose that the organisatorial and technical aspects of the civilising achievements, which the old cultures of the West have built up in the course of many centuries, can within a few decades be transmitted to completely unprepared primitive peoples. Primitive people also have their culture. It rests on religion, custom, co-operation, on temperament and feelings, on the sense for beauty and order. But the technical civilisation which Truman has in mind is something quite different. It rests on extensive

cognition, knowledge and research, on sustained rational effort, on craftsmanlike as well as industrial experiences and traditions. A long period of collaboration, guidance and education is necessary if it is to be transmitted to primitive peoples. Institution must be built on institution. But above all it is necessary to expend capital savings to build up the institutions necessary for technical progress. Where money is available civilisation comes into existence, culture can come into being even without money. Culture thrives in impoverished times; in times of prosperity culture is often outstripped by the so-called progress of civilisation. German culture never flourished more mightily than after the material desolation of the Thirty Year's War. And how far culture has remained behind civilising (technical) progress, we can see today. Money is not in itself capital. Only saved money can form capital. Only when money is put to work in production can it find application as capital. No collective authority can undertake this task. It must remain in the hands of the individual creative entrepreneur.

We must return to the old method by which we aided the development of young countries before the world wars. The required capital must be obtained out of our savings, not by means of the inflationary creation of money. Thanks to technical progress the effort devoted to development ought to become effective far more rapidly in our time. Nonetheless, its tempo and extent must be determined by the capital market, and not by politics.

My third proposal was aimed at achieving this end: I suggested that five milliards should be taken out of the Bundesbank's illiquid, unprofitable gold reserves and put to productive use. The Bundesbank would float an overseas company with a capital of five milliard Deutschmarks. With this sum the overseas company would purchase gold to a value of five milliard Marks from the Bundesbank, and as a result the incorporation money would revert to the Bundesbank. In place of five milliards in gold (out of a reserve of seventeen milliards) the Bundesbank would have on its books five milliard shares of the overseas company, which in its turn would now possess five milliards in gold. With a cover backing of five milliards in gold the overseas company would then raise loans on the German

capital market, and use the proceeds for development aid. It would undertake this development aid together with private concerns.

This scheme observes all the basic principles enumerated in the foregoing. The inflationary increase in the circulation of money would be abated, because the financing of development aid would be taken out of the hands of parliament. Its extent would no longer be determined theoretically under political pressure, but would be strictly conditioned by the capacities of the capital market. All suspicions of political motives would vanish, because decisions would be taken on the basis of purely economic considerations. In addition, the public authorities would be spared the worry of raising capital to cover outlays in quite a considerable field.

Young countries are not greatly served by purely material help. It is equally important that 'know how', the technical and organisation knowledge which makes it possible to apply material help, should also be imparted to them. Foremost in this respect is to know how to handle money. All the world knew that the Reichsbank had conquered the first inflation and stabilised the German currency, that a well thought-out and forcefully-prosecuted credit policy had succeeded in abolishing unemployment involving six and a half million workers, and that German foreign trade had been maintained at a high level through the introduction of a bilateral offset account system.

Thus it was not surprising that after 1945 a number of young countries approached me in order to avail themselves of my expertise. Germany, which was in the care of guardians, had no use for my expert knowledge. An attempt by American republican circles to enlist my aid in reforming the new German currency foundered because of the opposition of the fanatical Morgenthau politicians. Later, when certain powers once again reverted into German hands, the rulers did not consider me to be a suitable collaborator. Already before my political persecution was over, Chancellor Adenauer urged upon me in writing not to return to public life. In the interests of the responsible government which he was endeavouring to create I gladly did him this favour. My first article in Der Spiegel appeared in 1948 under the title I do not wish to intrude.

Nine foreign governments discussed their monetary and economic policy problems with me. The first to consult me was the dynamic government of Indonesia. A three-month stay in this land, endowed with fabulous natural resources, has left me with a deep and lasting sympathy for the Indonesian people. Once its national aspirations have been satisfied, Indonesia will become one of the most flourishing countries on earth. Except for wool and cotton, it has almost limitless reserves of all raw materials. There is no grass for sheep to graze on, and the climate is not suitable for cotton. Instead there is every kind of wood fibre.

At the end of my visit I made a report which was printed in German and Indonesian. All higher government officials were given a copy to study. In the course of the country's development the government has put not a few of my recommendations into practice. If the economic, and particularly the monetary, development of Indonesia does not always make allowance for Western viewpoints, the cause lies in the vehemence with which national political interests are given precedence over all other considerations.

The high level at which the characteristic bearing of this lovable people must be assessed was demonstrated when I was confronted with an example of Western stupidity. After my Indian friend Mirza Ismail had lost his post as President in Mysore owing to India's new political reorganisation, he accepted a UNO post in Djakarta. When a UNO representative, a Canadian called Kinlyside, came to Indonesia on a visit, my friend held a reception on his behalf to which my wife and I were invited. When the guests were introduced we greeted Mrs Kinlyside, who shook hands with my wife and myself. Then Mr Kinlyside also shook hands with my wife, but when he came to greet me, he withdrew his hand with the words 'I will not shake hands with you, I know all about you'. With an apology to our host, my wife and I left the reception immediately. The following day brought two reactions to Mr Kinlyside's behaviour. The Indonesian government gave him to understand that there was no room in their country for people who insulted their guests; and Mirza Ismail gave up his UNO activities. I for my part mollified my Indonesian friends with a reference to a poem by Seumes which closed with the words addressed by a Canadian Red Indian to a white man 'Now you see we savages are the better people after all'.

In Syria, the government was confronted with the task of replacing the private French central bank by a nationalised central bank. It had commissioned a Belgian financial expert to make a report, and asked me to check his findings. To everyone's satisfaction I was able to approve the Belgian's report in every particular. A few further recommendations which I made were subsequently adopted.

I was called to Iran by one of the most capable men I have ever met. Mossadegh was one of the few statesmen who succeeded in reducing the corruption, traditional in Persia, to a minimum. Mossadegh foundered politically because of his insufficient understanding of the Anglo-Saxons. Perhaps they have realised in the meantime that he was ahead of them and his times.

Thanks to good English administration India was well on the way to organic growth in its economic development. Its captains of industry Tata, Birla, Jalan, Sarabhai, and many others have considerable achievements to their name. A few enlightened Rajahs, particularly those of Mysore and Hyderabad, also achieved exemplary advances in the administrative field. Yet the enthusiasm which accompanied India's accession to full political independence led the Indians to tackle their difficult tasks too hastily and too ambitiously. It so happened that I was in India when the first fiveyear plan was drawn up. Nehru asked me to give him my opinion on it. It was the first time that I was obliged to disagree with those who asked me for my views. I arrived at the conclusion that the magnitude of the plan and its investment requirements far exceeded the available resources. I advised against the preparation of a fiveyear plan encumbered with such detailed advance dispositions. I was of the opinion that the political propaganda effect which it was hoped would result from this plan could easily turn into its opposite. 'Every year,' I said to Nehru, 'you will be asked how much of this plan has been realised. Let the industrial planning develop organically with the help of private enterprise. Concern yourself instead with

the promotion of agriculture. Start one regional irrigation scheme after the other. If every year you can proclaim that so many more hectares have begun to produce foodstuffs, then this will be far more effective propaganda than the announcement of your five-year plan.' I believe that actual developments have proved me right. India's commercial credit has fallen because of its excessive foreign indebtedness. Today it lives on its geographical significance in the power game of Western politics.

Nehru showed himself deaf to my views. In his country as in some others purely political considerations overshadowed all economic interests. I had the same experiences in Vietnam, in Algiers, in Egypt and in the Argentine. Everywhere my recommendations were approved in theory, but no one could be persuaded to put them into practice. As a result I did not always make friends amongst the ruling politicians. In the conflict of the parties, and under the pressure of international events, governments also change too frequently, so that even with the best will in the world it is impossible to achieve positive results. To be quite honest, the role of advisor is a thankless one.

When the governors of the Argentinian central bank rejected my findings with ironical remarks, informing me that their president would shortly fly to Europe and return with a pocketful of credits which would put Argentina's affairs into order, I could only wish him a happy journey. As could have been foreseen, his trip was most unsuccessful. Yet this country, richly endowed by nature, suffers only from defective organisation of its monetary economy. In a country possessing so many commodities for world-wide trading as does Argentina with its valuable meat and other agricultural products, it should be child's-play to create a well-ordered money and credit system. In such a country the policies pursued by the central bank alone, even without state management, can further the economic order considerably.

Next to Indonesia my greatest and happiest success was in the Philippines. The Philippine National Bank (not the central currency bank) together with the President of the State, Garzia, invited me to pay the Philippines a visit. I spent four weeks in Manila studying

the country's economic conditions, and soon discovered that the main trouble with the country was that everyone tried first and foremost to make something out of the state. The president of the central currency bank, who did his best to bring about a healthy financial and monetary situation, was also not up to coping with these circumstances. My report dealt fairly and squarely with the situation, and would no doubt have foundered on the rocks of political intrigue had the opposition not adopted my proposals as part of its policy. This helped the opposition to win the next election.

The mere giving of money is seldom a suitable way to help countries which need and are ready for development. In my work I was constantly concerned with finding new solutions to the problem of how one should proceed in order that the productive resources of a young country might be developed. Soon after I had concluded my Indonesian report, I made a practical suggestion to the Indonesian government.

In South Sumatra there are deposits of iron ore which are worth mining. After the liberation the workings had been abandoned. I interested a Rhenish-Westphalian mining concern in exploiting these deposits with their own capital and under their own technical direction. The ores were to be sold abroad – I had Japan in mind. Blast furnaces, and later rolling mills, were to be built with the proceeds in foreign exchange. When interest on the invested capital had been paid and an appropriate profit on the investment had been made, the whole enterprise was to be handed over to Indonesia. At the time the Indonesian government was not yet sufficiently well-organised to carry out this proposal. But in the spring of 1963 President Sukarno came back to the idea, and proclaimed it as part of his economic policy programme under the heading of 'production sharing'.

After this my attention was drawn to a practical project. The very considerable Sumatran palm kernel harvest could not be fully utilised industrially because there were no refineries. I accepted the challenge, found the necessary capital in Germany and drew up a working programme. Germany was to build the plant and to run it until sufficient revenue had been derived from the sale of palm oil

to enable the capital to be repaid with interest, together with a suitable margin of profit. This would have taken three years at the most. Although the development ministry of the Bund gave lively support to the plan, it foundered on shoals of bureaucratic formalities imposed by the other Bund authorities which were involved. According to my information the Japanese have undertaken a number of different joint enterprises with the Indonesians on the principle of 'production sharing'.

The palm oil refinery project is only one of many possibilities for the development of young countries. Mining, forestry, fishing, agriculture, etc offer opportunities for opening up new sources of exportable goods, the proceeds from which in foreign exchange ensure that interest on and repayment of the capital invested by the foreign lender will be received. Should it prove desirable to promote such joint enterprises, then a guaranteed sale of the resulting goods at fixed prices is a way of helping development also open to countries like Germany which have no surplus capital.

It is one of the tasks of everyone responsibly engaged in economic activity to make reserves and to build up some capital. No one wishes to be exposed to the fortuitous incidence of illness, accident or unemployment without being able to fall back on a reserve. Everyone wants to be in a position to go on holiday, to enjoy his old age, to have leisure for self-development. It is degrading to exist merely from hand to mouth. Whether one makes his capital by savings and sacrifice, or by profit and speculation, is not of the essence for our investigation. Here we are interested in the role played by money in the building up and preserving of capital.

To amass money is the most comfortable way of building up a fortune, because it can be saved in the smallest quantities. A child's piggy bank, or the savings book of a savings bank can be used for the smallest of amounts. When these accumulate in the course of time the resulting sums can be converted into large property values, plots of land, shares in a business, etc. To achieve this end one thing is essential: the money must retain its value throughout the period over which it is saved. After I had published my warnings in the magazine Quick, I was almost buried in a flood of inquiries, which all asked how one could invest one's savings in such a way that they would not be affected by the creeping fall in the value of money.

Assets constant in value which can be acquired for small amounts of money are rare, one can almost say they are non-existent. For it is not only a question of preserving value, it is also desirable to hold one's capital in a form in which it is easily accessible in hard times. Coins, postage stamps, painting, objects d'art, which can be

purchased for small sums, are not of much use in times of need. True, they can be sold for money, but usually their value fluctuates wildly because they are subject to the vagaries of fashion. Such value depends not on the needs, but on the foibles of individuals. Recently offers by the thousand have been made to the public, inviting and advising them to put their money into postage stamps as an investment. The stamp dealers have made use of the fact that the small man is hard put to it to find assets in which he can invest his small savings. A similar type of sales propaganda advocates the purchase of coins as an investment. And recently we have even seen sales brochures which extol the virtues of diamonds, and exhort savers to buy them as investments.

To put one's savings into commodities such as metals, wood, building materials, or articles for everyday use, (domestic goods, tools, etc) is possible. But since such commodities are dealt with in the normal course of trade a costly organisation for their acquisition, storage and sale in case of need is required. A considerable expenditure of one's own labour and time is also necessary, and there is a great element of risk. Similar considerations apply to the acquisition of a share in a productive concern, insofar as this is at all possible with small sums of money. This leads one to say that money and monies due offer the only means of saving in order to build up a fortune which is open to the broad masses.

In a fully-employed economy, savings capital comes into being comparatively rapidly. On the occasion of the twenty-fifth anniversary of the reign of William II in 1913 a number of inquiries into the wealth and welfare of the German people were conducted. At that time the annual capital growth was calculated to amount to 10 milliard Marks. Today an annual capital growth of 15 milliard Marks is estimated for West Germany alone (here it must be remembered that this figure is expressed in an inflated currency). In an economy whose stock of capital goods was so sadly depleted as Germany's after the Second World War even a high rate of capital growth can only make a partial contribution to the needed restoration of the assets which were in existence before the war. The construction of new dwellings, new factories, new machines, new

routes for and means of transport, requires immense sums of money. In addition, many plants and machines were antiquated, if they were not destroyed, and countless concerns are in need of rationalisation. Furthermore, the increase in population necessitates a continuous increase in the means of production. There is also a great need to rebuild Germany's foreign trading organisations, without which the necessary increase in Germany's exports could not be brought about. Germany's capital needs by far outstrip Germany's capital growth.

Unfortunately, the endeavour to convert the largest possible proportion of savings into productive apparatus contributing to the reconstruction of Germany was not successful. A frighteningly large proportion of the monies which could have been saved has been spent on immediate consumption instead of being employed in production. Expenditure on ephemerals has by far exceeded all reasonable bounds. Even if one sees no objection to the desire to regain a former standard of living after all the privations of war, and even if one regards a rise in the standard of living as justified and desirable, nonetheless the reasonable boundaries have been exceeded. Here it is not only the craze for amusement and entertainment and the urge to travel which are held in the balance, but also the unusually heavy import of foreign consumer goods. The encouragement of import, by means of which it was hoped to damp down price inflation, has made a considerable contribution to the withholding of capital savings from production. No one can reproach me with begrudging anyone anywhere a higher standard of living. Here I only wish to make it clear that the slogan 'prosperity for all', conspicuous consumption, and the rapid transformation of inflated money into transitory comforts, have all impeded investment and its financing out of savings.

It is gratifying to know that since my warning call the government of Federal Germany and the Bundesbank have concerned themselves with taking steps to retard these processes. By means of a restrictive credit policy they are endeavouring to alleviate the price situation. The economy is coming to realise that some restraint in the financing of investment by means of short-term bank credits

must be exercised. Doubts about whether it was correct to assist the politically-dubious Common Market by favouring imports through prepayments which jeopardised Germany's foreign exchange surplus are beginning to emerge. Our wasteful way of life runs counter to the need to finance investments. Yet the tendency to squander originates in the constant fall in the value of money. Stable money would reduce the amounts squandered, and once again make saving attractive, because then the small man too would be able to build up capital. The small savings accumulated by the broad masses would once again flow into bonds, loans and mortgage debentures, and contribute to the financing of investment.

For its reconstruction the German economy needs as much by way of savings capital as it is possible to accumulate. Savings capital must constantly be converted into real goods which alone constitute the national wealth. The small man's saved pennies accumulate in the savings banks and the banks, and these for their part makes this money available to the productive economy by granting it credit. It would be logical if the saver were to share in the producing, and manufacture real goods in the proportion of his savings contributions, but this is not the case. Nor do the banks and savings banks obtain a share of the real goods produced with the credits granted by them. They are only go-betweens - the lender, for his part, however, converts the money given in credit into valuable real goods. The saver merely receives a claim to money, but he expects this claim to retain its value during the tenancy of his loan. So long as it keeps its value all is well. But should it depreciate, then the saver has been deceived. It must be the first and foremost aim of all economic and monetary policies to avoid this deceit. In the last ten years this currency deceit has not been avoided. Naturally it was not intended. It is pointless to look for those who are to blame. But it is necessary to recognise the causes which have led to the devaluation of money, and to remove them.

Ever since indignation about the continuous depreciation in the value of money began to be voiced by an ever-growing number of voters, we have heard politicians promising to tackle the causes of inflation. Restrictions on state expenditure, credit curbs, public

savings measures, all these and more are on the agenda. Let us hope that these good intentions are put into practice. The authorities have been more active in lessening the effect of the creeping depreciation in the value of money on the saver by improving his income from current investment through premiums on certain kinds of savings, tax concessions on certain kinds of securities, etc. These concessions have not been entirely successful. The depreciation of money has progressed faster than the premium pledges could make up and such premiums have also led to a greater financial strain on the budget.

Recently, concerted efforts have been made to popularise the purchase of shares amongst a wider range of savers. By purchasing a share the saver obtains a participation in the substance of a transport, industrial or trading concern conducted in the form of a joint stock company. He receives a real value. Does this serve his interests?

The saver seeks three things for his savings: liquidity (the easiest possible reconversion into ready cash), constancy of value (no loss in substance) and a fair annual return (interest or dividends). The purchase of shares by the individual saver normally takes place through his bank on the stock exchange, accessible to all and sundry. Now the stock exchange is also the field of activity for people who are specially gifted for speculation. They buy shares in the expectation that a company's rising profits will lead to a rise in the price of its share. They seek their profit not from the annual dividend yield, but from increases in share quotations. Each rise or fall in dividends leads to a rise or fall in the quotation of the share concerned.

The saver cannot buy a share at its nominal value, but in almost all cases only at a price above par. He pays a premium for the speculative opportunity which the share offers. If a fixed interest bearing security (bond or mortgage debenture) carrying interest at six per cent can be obtained at par, then an equity (share) with a dividend of six per cent will be substantially more expensive. A six per cent dividend on a share which costs 120 per centum gives a yield of only five per cent and not six per cent. Thus anyone who invests his money in shares must from the very beginning reconcile

himself to a lower rate of interest than he would obtain from an investment in fixed interest bearing securities (government bonds, mortgage debentures, debentures, etc). The average yield on all the shares handled by the stock exchange fluctuates at around three per cent. The saver who buys shares is seduced by the expectation that he will be able to make up the missing proceeds by speculating on a higher selling-price. Shares make savers into speculators.

This is hardly to respect the saver, it even implies disrespect for money. It is a common consequence of inflation. Constant depreciation in the value of money leads to squandering, to light-hearted expenditure (gambling, betting, stock exchange speculation, bingo, etc), to unnecessary and unproductive luxury. Squandermania and luxury are hostile to every savings urge; they are the gravediggers of saving. They diminish the sense of responsibility which should imbue every citizen with the desire to make provision for accidents without expecting the state, i.e. the taxpayer, to shoulder the whole burden of his care and welfare.

Two cases of share placings amongst savers which have so far not turned out well are those of Volkswagen, and that of VEBA. The circle of purchasers was artificially restricted to those within certain income brackets. The shares were offered at a price which was not shaped by stock market influences but which was arrived at quite arbitrarily. It was assumed that this price lay below the market price so that the buyer could count on an immediate gain. This proved to be the case with Volkswagen, but did not occur with the VEBA shares because the selling-price had been pitched too high. In order to soothe the indignation felt by the purchasers disappointed in their expectations, the VEBA quotation had to be supported on the stock exchange by state purchases. The Volkswagen share quotation fluctuated between 900 and 400.

Anyone who has followed the ups and downs of stock exchange quotations over the past five years knows what heavy losses were suffered by those shareholders who bought at too high prices. That others who bought cheaply made profits is no consolation for the saver. He is not in a position to react in good time to the fluctuations

in stock exchange quotations. He has no kind of influence over the management of the joint stock companies in which he has a small share. The so-called co-partnership rights of the employees which are exercised by the supervisory board elected by them make a certain amount of sense insofar as question of wages policy and the regulation of working time are concerned. But they have no application to the technical or commercial administration of a concern. In most cases the administrative policy is laid down and the administrators chosen by those shareholders who have so large an interest in the concern that they control the deliberations of the annual general meeting.

In order to enable one to appreciate that the character of the joint stock company has changed greatly in our present day, one must study the history of its development. When the first large concerns came into being in the German national economy, they went far beyond the capital resources of individuals. The joint stock company was an admirable instrument for the carrying out of larger economic undertakings. The entrepreneur sought out friends and interested parties who jointly raised the capital necessary to take up the shares. In the beginning the participants kept in touch, had discussions, and made joint decisions about the management of the business. The natural changes in relations with family and friends soon led to these shares being made negotiable. The stock exchange extended its activities to cover such shares, and made the share into an anonymous tool which could at will be transferred from one owner to another. The original circle of interested parties which determined the tasks and policy of the concern slowly disappeared. New circles were formed, not always interested in the management of the concern, but more concerned with the profitable investment of their capital. When market conditions looked favourable shares were bought, when things took a turn for the worse they were sold. The share became an extremely mobile element which changed hands rapidly. Because a company meeting could be controlled with only 51 per cent of the share capital, these shares became a desirable object for entrepreneurs not merely concerned with earning interest on their capital, but also wishing to participate in

the conducting of a company's affairs. It was not only the pure capitalist who bought the shares, but also the entrepreneur. For him the share was attractive not merely as a means of earning dividends, but also as an instrument for the development and control of a company. This was the beginning of the era of the formation of large combines. Shares no longer changed hands at a rate dependent on market conditions; even during slumps they continued to be held by large shareholders and entrepreneurs.

Today, new joint stock companies are founded only rarely. The capital for new enterprises or for expansion is almost entirely provided out of the accumulated profits of the large concerns or their large shareholders. About 80 per cent of all German joint stock companies are in firm hands. This means that only some 20 per cent of all existing shares are traded on the stock exchange, not more than a few milliards. Those dealing on the stock exchange play a merry and cunning game with this 20 per cent of shares. This does not mean that I am against the stock exchange. I consider the stock exchange to be just as important as any other commodity market. One need only remember that the turnover in shares is only a small part of the activity of a stock exchange, a part which dwindles into insignificance when compared with the turnover in loan funds and fixed interest-bearing securities. The stock exchange is and remains a necessary market for the distribution of the monies which are daily transferred in large quantities from those who have money to spare and lenders, to those who need money and borrowers, as well as for the purchase and sale of fixed interest stock.

One of our leading bankers recently expressed the opinion that if three per cent of the amount at present in savings accounts were to be invested in shares, this would lead to the sale of shares to a value of three milliard Marks. He completely overlooks the fact that shares available on the stock exchange are in no way commensurate with a demand of this size. Sales of this order would only further decrease the number of shares dealt in on the stock exchange. After all, the idea of interesting the saver in buying shares is to persuade him to hold shares as investments, and not to re-sell them on the stock exchange. Let us leave the stock exchange in the hands of the

professionals and the dedicated speculators; it is not suitable for the saver. The saver need not envy the speculator. He seeks security, not risk.

It is true that a share can usually be converted into cash, but frequently only at a price per share which is less than the original value. Its yield fluctuates, and is on average considerably lower than that of fixed interest-bearing securities. In order to reduce the risk inherent in shares investment, the so-called investment, or unit trusts, have been devised. These are a collection of shares of the most varied companies in all branches of industry, so that the risk is better distributed. But apart from thus spreading the risk nothing has basically changed so far as the saver is concerned. In the investment trust, too, the shares retain their speculative character.

The idea that the circle of those who invest part of their fortunes in shares should be enlarged is of course quite a proper one. The financing and growth of new industrial concerns requires very large sums of money. To provide these sums the capital savings of the broad masses must also be utilised. This can in many cases be done by floating industrial loans, as frequently happened before the war. Yet such loans can only form part of the working capital of a company. Thus it will also be necessary to increase the company capital by the issue of shares, particularly since one of the preconditions of floating a loan is always that the value of money should remain stable.

Taxation legislation which facilitates and promotes the founding and running of joint stock companies is a prime necessity, should one wish to create share capital. No such taxation legislation exists today. On the contrary, there is a trend to replace the joint stock company form by the private limited liability company form. In our time an endeavour is being made to encourage the formation of capital savings by means of savings premiums. It seems probable that the favouring of share issues would be far more effective in attracting capital savings into industrial capital funds. In its present form, unfavourable from the tax point of view, the share – quite apart from the inherent risks – has little attraction for the saver.

To be capable of coping with the demand a stock exchange must,

like any other market, have at its disposal an adequate quantity of the product in which it deals. That is not the case in Germany at present. The volume of share transactions on the German stock exchanges bears no comparison with the turnover of the London, Paris – let alone New York – stock exchanges. The smaller the number of shares which is on the market, the higher the rises in the quotations. The greater the number of shares available, the smaller the effects of speculations. An increase in the quantity of shares dealt in on the German stock exchanges is highly desirable. It would also help to combat the trend towards larger combines. And quite of its own accord, such an increase in the number of shares available would lead to a strong increase in the popularity of shares with savers.

The transfer of the state's share holdings into private hands is also strongly indicated. Such a transfer must, however, be conducted on strictly commercial lines – the shares must not be transferred by way of a gift to the socially-privileged. Should it not prove desirable to make use of the banking consortiums for the marketing of these shares, the Bundesbank ought to be entrusted with putting these shares on sale directly through the stock exchanges.

A great increase in the number of shares dealt in on the stock exchanges is the only means by which Germany could approach the admirable state of affairs in America where the broad masses are extremely interested in share ownership. Germany's legal provisions regarding the participation of employees and regarding large-scale business publicity would carry more weight without being open to so much objection if the interests of the broad masses did not rest on these legal provisions as well as on the alertness of those who have participated from the very beginning. Our large shareholders and great concerns are always afraid of losing influence should they not have the majority vote or a controlling minority interest. But sociopolitical developments will from now on aim at restricting the power of mere ownership, and support the influence of the diligent. The masses will always find it necessary to follow leading personalities. but not those who merely own property. However curious it might sound, in the masses, too, each single man thinks individually. He too looks for his welfare and prosperity not to a committee but to

a single man. For this reason the collective union policies will in the end be denied ultimate success. It is devoutly to be hoped that the directors of our economic policies will find ways and means of popularising shares by putting more of them on offer. The law-making authorities, for their part, will have to take steps to make things easier for shares so far as formal and tax questions are concerned.

I do not intend to strike an attitude on the problems of the distribution of wealth, which are always brought into the foreground, particularly by the unions. The distribution of the social product is a social problem, not a monetary one. But a few points of view advanced by the unions are relevant to our theme. I quote here from resolution No. VII of the sixth union conference of the union for the metal industry which took place in 1960. Here we read 'wage-earners should in all cases aim at building up their financial resources by the accumulation of freely disposable assets'. The qualification 'wage-earners' makes this formulation suspect. It originates in the very one-sided understanding of the interests of a certain section of the population. Another formulation from this same resolution makes this still clearer: 'the constant growth in the wealth of big business should be made accessible to the general building up of financial resources by wage-earners.' It is not merely employers, managers or wage-earners whom we have to thank for . the constant growth in the wealth of big business - all sections of the population play a part in this growth: the free professions, dealers, haulage contractors, insurances, brokers and agents, officials, scientists, and so on. And the restriction to big business also shows that the problem has been tackled quite one-sidedly only from the point of view of the unions.

It seems that the union leaders themselves have come to realise this fact. The most recent attitude towards the distribution of wealth, expressed as follows by the German association of trade unions (Deutscher Gewerkschaftsbund) on 6 October, 1964, seeks to avoid such errors 'In future economic policy must strive for a just participation of all sections of the community in the building up of national wealth'. Another ambiguity, which was also contained in the previous resolution, remains. We read: 'In furtherance of the aim of an effective building up of financial resources wage-earners must have the fundamental right of disposal over their property.' This is most confused and leaves many doors open. Fundamentally the workers should be able to dispose. Not the individual workers Should there be a communal right of disposals If so, then one may ask what rights the individual has in the communal disposal. What is to be understood by the furtherance of the aim of an effective building up of financial resources? Does this mean any restriction upon the individual in the way he utilises his share of the national wealth?

A mere recitation of the phrase 'just distribution of wealth' does not bring us any nearer to a solution of the problem. A distribution of wealth which treats the incapable in the same way as the capable cannot be called just. The masses find it perfectly natural that the capable and gifted should be rewarded more highly. No one has yet complained about the high fees paid to pop singers or prize fighters. The idea of collective savings gives rise to the fear that its ultimate aim is to bring the administration of the collective wealth into the hands of the trade union leaders by means of co-operative organisations. Accumulated collective wealth results in sums which, contrary to the assets of the small saver, permit immediate conversion into large-scale real goods, such as landed property and industrial shares. This would permit trade union officials who lack the necessary entrepreneurial qualities to exert a considerable influence on industrial concerns.

Marxism demanded the nationalisation of the means of production, and thus the handing over of property to the democratic totality of which everyone forms part. But the collective saving which the unions propagate would lead to the workers' property, its use, and its influence, being transferred to the trade union leaders, i.e. to a non-democratic, that is oligarchic, officialdom. The individual worker would be deprived of the enjoyment of his own financial resources.

The equality of all men is a wonderful principle for all claims in

the field of mutual economic relationships. But we are all under the obligation to develop our powers each according to his talents and abilities. Unfortunately talents and abilities are not equal. And when the unions today advocate so-called collective saving they are setting a completely wrong aim. To allocate wealth to a manyheaded board, a group of union members, or any similar social group to which the individual saver or shareholder is attached, does not represent property. Property over which one has no right of disposal is not property. It is not the judicial right of ownership which is the criterion, but the freedom to deal with one's own property as one sees fit.

Here the difference in outlook between individualism and collectivism is made transparently clear. Each and every individual seeks the opportunity to develop his faculties, to pursue an activity which accords with his inclinations and to be at liberty to enjoy the fruits of his labour. Therein lies his freedom. For this reason it is the aim of democracy to give equal opportunities to all men. To take from men the right to employ the product of the successful grasping of opportunities in their own way leads to unfreedom and dictatorship.

In the modern national economy there is only one way to build up a fortune, namely through money and claims on money. The rapid mobility of money is its greatest advantage. Since the small saver always needs some considerable time to accumulate an amount which can be invested in real assets, it is crucial for him that the value of the saved sums should remain constant and easily rendered liquid in the meantime. That is why the savings deposits with savings banks and banks are today growing so much more rapidly than investment in certified claims to money (bonds, debentures, loans).

Before the war investment in certified claims to money formed the principal element in building up a fortune. They offered high liquidity because bonds, mortgage debentures and loans were dealt in daily on the stock exchanges in large quantities. The stock exchanges were needed not so much for dealings in equities, as for the large daily turnover in money and fixed interest bearing securities.

Today things are fundamentally different. Because of inflation the stock exchange turnover of fixed interest stock is small. The great capital saving institutions in which the saved funds accumulate have replaced the individual small saver. The saver stays liquid, the institutions buy securities for investment and take risks.

As a result of war and economic crises a number of concerns in the form of public companies have come under state ownership. The idea to return such concerns into private hands was and is correct. The state is an administrative institution, and is not suited to running economic enterprises bound up with risk. Initiative, a wealth of ideas, the ability to make quick decisions, competition and many other things are needed to make such enterprises succeed. Enterprises which are not subject to these requirements, or enterprises which may in the interests of the community be given the character of a monopoly, might be suitable objects of state enterprise. The post office, the railways and the airlines are examples. Whether certain basic industries also fall into this category (mining, forestry, minerals and ores) is open to question. But a manufacturing industry without private enterprise is unthinkable in modern international competitive conditions.

At one time I myself was concerned in returning into private ownership a large parcel of shares which was in the hands of the state. During the banking crisis of 1931 the Deutsche Golddiskontbank (German Gold Discount Bank) which belonged to the Reichsbank took over shares in the Dresdner Bank to a nominal value of 45 million Marks. Four years later the Dresdner Bank approached me with the request to release these shares, since the bank was now in a position to place them with its clients. The Reichsbank immediately acceded to this request. The shares were not acquired by some big vested interests, but were placed amongst the general public. Today too there are only a few banks the direction of which is influenced by groups with vested interests. The shares of the three large deposit banks in particular are distributed amongst the German public at large - in contrast to a considerable number of industrial concerns which are subject to the influence of certain individual groups.

Should our government wish to relinquish control of those public companies which would fare better under private enterprise, then the methods of returning such companies into private hands used hitherto should be changed. Economic enterprises should not be given away. They should be offered to those who have an interest in directing the economic policies of such concerns, and who possess the required qualifications. The price should be arrived at on the basis of the price which would be formed under competitive conditions on the open market. And the saver should not be enticed into buying shares.

My alarm call published in the aforementioned illustrated magazine had an effect which was far-reaching in its extent and which came at the right time. Since then the theme of inflation has never ceased to be in the forefront of public discussion. Even if it was possible to damp down such discussion before the Bundestag elections in September, 1965, after the election was over the theme returned to the centre of the stage. Above all, the Bundesbank summoned up the energy to change its attitude. At first it merely cajoled, and placed the responsibility fair and square on the shoulders of the government, but then it realised that talk was not sufficient, that it had to act. To appreciate this fact one need only compare two speeches by Blessing, the first in January, 1965, at the Berlin stock exchange, and the second on the occasion of the conference of the German co-operative society in Baden-Baden in October, 1965. In his first speech Blessing sought to play down the possibility of price rises and inflation, in the second speech he defended the Bundesbank's restrictive policies and asserted that to combat the deceit of inflation he would not shrink back from deflation. In any case, Blessing has at last applied the brake to the excessive credit granted by the banking system, and is making an effort to restrain the public authorities from making too great demands on the capital market. Even if such measures have come somewhat late in the day, they should nonetheless be acknowledged. It is to be hoped that the Bundesbank remains firm, but after the laissez-faire policy pursued hitherto it is not easy to dispel all doubts.

The fact that towards the end of 1965 the Bundesbank released

one milliard Marks from the minimum reserve to the banks also has grave overtones. This milliard could not have been obtained by the realisation of some assets or other (gold or Dollars) but only by resorting to the bank note printing presses, and thus by means of an inflationary increase in the circulation of money. As I have shown in the previous pages, the Bundesbank put its head in a noose when it accumulated a minimum reserve.

Unless the Bundesbank takes a different road, it will be unable to prick the banking system's credit balloon. One such other road would be to say to the banks 'So you need money? Then give up a part of your over-extended activities. We are prepared to take over from you a proportion of the credits which you have granted to German industry for the purchase of raw materials overseas. We will finance these purchases out of our Dollar holdings, and will thus not be compelled to increase the circulation of money. You for your part will have more funds with which to improve your liquidity'.

The mistakes in monetary policy which need to be remedied are considerable. Nothing has been done to combat imported inflation. The resulting flood of money has given a new and powerful impetus to the boom conditions of an economy already dangerously overheated by the need to make up for the despoliation of war. The cheap money policy has stoked the boom conditions even further. The ever-growing depreciation in the value of money has shaken confidence in fixed interest bearing securities, and shattered the capital market. The revaluation of the Mark, and the law taxing the dividend coupons of German securities, have had a deleterious effect on foreign confidence and trust in the German capital market. The amassing by the Bundesbank of unusually large stocks of gold and foreign exchange created completely false ideas about the reputed wealth of Germany, and gave rise to the covetousness of those who wish to make use of this reputed wealth to finance overseas ventures. It is quite a long list of sins, all of which must be atoned for and replaced by a carefully thought out monetary policy. It is gratifying to note that at last the world of scholarship is also beginning to bestir itself. In the report by the committee of experts

from which I quoted, a number of professors gave vent to their criticisms at the government's request.

Early in March, 1965, the List society of Frankfurt am Main organised a discussion and published the proceedings in a booklet. Naturally not all present were scientists. The gathering consisted of a small circle in which science, the economy, management and politics were all represented. Amongst the sixty-odd participants, some twenty came from the sciences, fifteen from industry and the economy at large, ten from management, and five from politics (this break-down may not be quite accurate). Subsequently, I was especially glad that privy councillor Vocke, my former Reichsbank colleague, was present. Unfortunately, the Bundesbank was not represented by its president, but two of its area managers, from Bremen and from Baden-Württemberg, took his place.

Now certainly no one expected a practical or practicable solution of Germany's monetary difficulties from this conference. That is too much to expect from any conference. Nonetheless, everyone agreed about the facts of inflation, and about the need to abolish it and avoid a recurrence. There was also general agreement that to achieve this end there must be restrictions on expenditure. But there was some difference of opinion about the question of the free exchange rate and a possible change in the price of gold, as well as about some other questions of detail. And the question of what was to be done in the field of monetary policy remained unanswered. A few earlier errors were admitted. Pfleiderer's (Landeszentralbank, Stuttgart) utterance 'what in 1961 we did not do as a central currency bank, but allowed to be done to us by the decision of the government of the Bund in regard to re-valuation' was to the best of my knowledge the first public acknowledgement of the fact that the Bundesbank - quite rightly - regarded the government's decision to be mistaken.

It is regrettable that the Bundesbank did not give public expression to its rejection of the revaluation of the Mark. While, after my departure, Hitler made the Reichsbank into a subjugated organ which could not do other than carry out the government's orders, Germany's central bank was entrusted with certain responsibilities

by the Bund banking law, which *inter alia* permit it, nay oblige it, to express independent opinions. In the case of the revaluation of the Mark we were dealing with a basic and vital decision in regard to which the currency bank should have done more than simply keep its own counsel.

The revaluation of the Mark was detrimental to all foreign customers for German manufactured goods. Dr Düren of the Deutscher Industrie und Handelstag rightly objected during the discussion that an arbitrary intervention into the exchange rate structure put trading policies relating to the export of investment goods tied up with long-term credits into jeopardy. And this is just what Germany did to its customers with the arbitrary revaluation. Anyone who had bought in Deutschmarks and acquired the necessary sum in Dollars suddenly had to find five per cent more Dollars in order to be able to pay the agreed price. Had he bought in Dollars he would have been none the worse off. Then it would have been the German sellers who were worsted. German sellers remain unaffected by changes in exchange rates if they sell in Marks.

Professor Lutz gave expressions to an excellent idea: 'It is possible to gain from inflation only if certain people suffer thereby. Should this not be the case then it has no effect whatever' (the profit-producing effect for industry is meant). This idea is the death knell of all attempts to transfer the price inflation to wages and salaries by constantly increasing the latter in proportion to the price rises. No one is able to profit from inflation unless someone else loses by it.

If the proceedings of this discussion thus confirmed a number of the views which I had previously put forward, my hopes for a positive programme of action were not fulfilled. On the other hand in his summing up of the general discussion Professor Giersch gave an admirable exposition of the problem of present-day monetary policy. So long, he said, as the gold standard was observed, that is in the period before the two world wars, it was the international gold movements brought about by the flexible exchange rates which formed the compass of trading policy. When there was an outflow of gold, tighter monetary and credit policies were indicated. When gold flowed in, it became possible to pursue more lenient

monetary and credit policies. This was a rule which was obeyed on an international scale, and which made the dispositions of trading policy simple for all concerned.

'We have lost this compass,' Professor Giersch continued. 'Every government, and those social and economic associations which aid and abet it, or think they do, conducts its trading policies by trial and error. Domestic economic interests predominate. This is especially grave for a country as strongly interested in the world market as Germany.' From this Professor Giersch concludes correctly 'International trade and capital transactions as free from risk as possible, and a stable rate of exchange which effects equilibrium can be attained without Schachtian restrictions only if the governments so co-ordinate themselves in their behaviour to each other that no disturbances are introduced into the system from this side'.

That is, in its shortest form, a representation of the views of those who today count as currency experts, but unfortunately it is only an ideal, not a solution. It asks that all countries pursue economic policies where everyone pays due regard to the economy of the others. This would mean transposing neighbourly love into the field of international economic competition.

Professor Giersch makes it quite clear that a co-ordinated international economic policy is a precondition for that new international monetary agreement of which there is constant talk at present. Only then will currency stability cease to be a problem. Of course, when this happy state of affairs has been achieved the devising and carrying out of currency policies will no longer be any great art. Then everything will go forward automatically. Will this precondition be fulfilled? The answer cannot be anything but a plain no. Thus something else will have to be done.

When I read the words 'without Schachtian restrictions' in Professor Giersch's exposition I was startled. Were my currency policies discussed at the Frankfurt conference? In my absence? To my surprise I realised that the German monetary policies of the 'thirties had taken up a considerable amount of space in the conference. The fact that the Reichsbank had been able to master the difficulties encountered at the time was not easily crased from

monetary history. The methods used then were recalled in association with the wish that one should not be compelled to use these methods or similar ones again.

The banker L. Albert Hahn, who is probably the greatest expert on and critic of American conditions, proved himself to be most sceptical about present-day endeavours. Hahn's point of departure was, quite justifiably, that the key to any international currency stabilisation lay with the United States. 'I am convinced,' said Hahn, 'that the Americans, unless at the last minute they go over to tight money policy, are with deadly certainty slipping into a gigantic international Schacht system . . . in reality the world is moving towards a Schacht system under which we will have to live for a long time to come.' Hahn predicts that a Schacht system will supervene unless the tensions of monetary policy are released by means of flexible exchange rates, or unless the internal domestic expansionary policies nurtured by cheap money are curbed by a dear money policy.

Professor Giersch and Albert Hahn agreed that the connections between the participants in the international economy would have to be ordered over a long term of years before monetary harmony could come into being. Under no circumstances can such an order be introduced by means of monetary policies. Monetary policy is dependent on economic policy, and not the other way around. But monetary policy is not always defenceless against erroneous economic policies. This was the lesson to be gleaned by Germany from the experiences of the 'thirties.

At that time we were further than ever from a co-ordinated international economic policy. All international trading policies discriminated heavily against Germany. Everywhere obstacles such as tariff walls, quotas and other impediments were placed in its path. If no counter-measures had been taken, Germany's currency would have sunk into a bottomless pit. But for Germany, as for everyone else, life had to go on. And by means of the Schachtian restrictions life could go on. The policies successfully pursued in the 'thirties sought to counteract each and every threat and wrongheaded measure taken by foreign powers. This resistance also gave

our opponents a better insight into the situation, and ultimately resulted in normal relations being re-established. The policies of the 'thirties were certainly not ideal, but they were unavoidably necessary at a time when every measure taken by those abroad was aimed at ruining the German economy.

Formerly, when international trading relations were normal and peaceful, flexible exchange rates helped to maintain order in the international currency system. Although they did not bring perfection, they would prove helpful today too.

Professor Giersch also considered unanimity in international economic policies to be very difficult to achieve. He did not want to shatter anyone's hopes and illusions. But I will go further – I regard such unanimity to be contrary to nature, and therefore impossible. One need only call to mind the amount of sovereignty which would have to be sacrificed by the individual countries if such unity is to be attained. The United States, Russia and China all observing a common economic charter, that is unthinkable – quite apart from all the other countries. The Common Market negotiations give us a foretaste of the difficulties.

But then, must we have perfection? After the nations have torn each other apart in the course of two world wars, they now seek a paradise on earth. The whole discussion about international currency today revolves around the catch phrase of international liquidity. That means: the world does not possess sufficient quantities of money to carry out the vast economic tasks which we have set ourselves. This is expressed by the words: lack of liquidity. The masses do not understand this jargon. Were one to say to the man in the street 'We do not have enough money to bring Asia, Africa and South America to the same technical level as Europe and the United States', he would reply 'Then why don't you give it up, or at least slow the process down?'

It seems that a war affects not only morals but also reason. The Western victorious powers are well-nigh panic stricken in their almost compulsive need to make good past errors and omissions. Under the sway of Communist propaganda they force independence and self-determination on primitive people who are quite unready

for it. They impart amenities, comforts and techniques to people who do not know what to do with them. They intervene crudely in the natural course of historical development, and sincerely believe they are doing good.

Such policies are of doubtful value. But what is certain is that it is quite senseless to prosecute those policies by means of artificially-created money, that is, money which undergoes inflationary devaluation to the detriment of the broad mass of savers, savers who in the course of the centuries have with diligence and effort built up a standard of living which the new countries expect to have presented to them overnight on a platter. Such a thing cannot be given away as a gift. It makes more sense to use our spare productive energies to stimulate the productive potentials of primitive countries and make them capable of development. But this can only be done out of surpluses, that is out of savings.

Germany has no need to make good any past errors and omissions in its relations with under-developed countries. Nor has it any kind of political interests which it could tie up with development aid. Unfortunately, Germany is not a sovereign state independent of foreign powers. Nonetheless, no one can prevent Germany from preserving its dignity and morality, and from applying its greater knowledge of some things. If Germany is forced to make payments against its interests and against its better judgment, then this must take place before the eyes of the world. The payments with which it is encumbered must be defrayed out of taxes and other receipts, never out of inflated money. The proposals for development aid which I made contained the proviso that Germany has the will and resolution to participate in development aid only within the framework of its savings. No one can compel a country to subject itself to inflation.

I was able to help in ending the first inflation, I sacrificed my office, endangered my existence, and forfeited influence over events in the attempt to prevent the second inflation. I do not wish to abet the third inflation by remaining silent. If we do not manage to forestall the third inflation in good time it will lead us into an economic crisis of such proportions that even 'Schachtian restrictions'

may not suffice to effect a certain cure. There is no such thing as a Schacht system. On many occasions I have told those who put their faith in systems that monetary policy is an art. Art and systems contradict each other.

Nor are the proposals which I have made in the present situation a system. They are measures tailored to processes which continually change in the course of events, thereby always requiring new ideas. Such new ideas must always be found afresh as required by the challenge offered by economic developments. Laws curbing dividends, bilateral trading policies, different sorts of Mark for different purposes, we do not want to see the like again. But if as a result of the unrestricted conversion of foreign currency, control of Germany's note circulation is taken out of the hands of the the Bundesbank, if the boom is overheated because of an enforced cheap money policy, and if Germany's contributions to development are either ineffectually squandered or spent without benefitting its economy, then ideas akin to those which had to be applied in the 'thirties will once again be resurrected. For instance, it would be possible to apply bilateral trading agreements to development aid.

Let us beware of a Schacht 'system', but let us also bear in mind that there is always a rational way of countering any irrational and outrageous demand. When the British Socialist Chancellor of the Exchequer, Sir Stafford Cripps, referred to me in 1945 he did not speak of a Schacht 'system', but said that without applying a few of Schacht's ideas it would be difficult to re-establish Britain's former position in the world economy. There will always be good ideas by means of which false notions can be combatted. It is unlikely that we shall reach a perfect international monetary system, but if we put our own currency in order we shall at least set a good example.

We must get away from the idea that our economic problems can be solved by means of theories, rules and formulae. Certainly scientific considerations can be helpful, particularly if they are based on experience. But economic life is so diverse, so changeable, that even the most brilliant prescription is bound to come up against events which it did not foresee. The Keynsian theory of deficit spending is basically correct, but it is founded on assumptions which are not always obeyed in the way provided for in the theory. One can learn to use tools, one can acquire experience, but the proper application of tools and experience necessitates an act of intellectual adaptation to each new circumstance.

Within a national economy one man can enrich himself at the expense of another. The one loses what the other gains. Competition and social policy are the motivating factors in the endeavours of the individual to obtain his share of the product of the entire nation. Economic policy lays down the boundaries of competition. Taxation legislation sees to it that the inequality between rich and poor does not become too great, but it is impossible to distribute more than is produced. It is sad that this home truth has to be repeated continuously. If one consumes more than is produced, one consumes not the proceeds of production, but its substance.

Economic policies must therefore be directed either at producing as much as will be consumed, or at consuming no more than is produced. Economic policy decisions are naturally made more difficult by the fact that a people's consumption, or rather the demand for consumption, can be extended almost to infinity. Production, however, is limited by the opportunities and willingness to work on the one hand, and by the available quantities of capital and raw materials on the other.

Every increase in demand stimulates an increase in production. The increase in demand after 1945 was enormous. The need to rebuild roads, houses, factories, communications and everything else which had been destroyed or worn out during the war led to an unusually great upsurge in production which was reflected in booming profits. The distribution of these profits amongst the population was very uneven. But what was worse – an insufficient proportion of these profits was employed for productive purposes,

instead a large part was spent without considering the morrow. A great part of Germany's investment activity was financed by means of short- and medium-term bank credits, and thus by means of book money which the banks created for the purpose. The Bundesbank tolerated this process, and gave it support through a policy of cheap money. Recently it has paid more attention to this factor.

The constant growth in deposits with banks and savings banks is always interpreted as a favourable sign, although the numerical growth only reflects the falling value of money. The saver no longer invests his money in long term debentures and loans. Instead he puts his money into bank and savings bank accounts from which he can withdraw it at short notice. The capital market of former days has ceased to exist. The savings banks and banks for their part lend money for the long term, and in the case of a serious run by the depositors they must in the case of Germany resort to the Bundesbank's bank note printing presses.

This is however tantamount to a new inflation since the central bank cannot convert its gold and foreign exchange reserves into Deutschmarks. The best it can hope to do is to realise these assets abroad in exchange for foreign currency. The excessive increase in home consumption has led to over-investment. Although by 1956 the ideal of full employment had already been reached, investment continued apace, and this with inflated money. Germany gives employment to one and a quarter million foreign labourers who drive up wages. Rises in production costs keep in step with price rises, and sometimes even outpace them. The more lavish home consumption becomes, the smaller a proportion of production is exported.

Should the government succeed in curbing public expenditure, it would make a considerable contribution to the restoration of the German capital market. If it fails, the only other means open to it is higher taxation. It has already started to tread this path by raising certain consumer taxes. But such a measure on its own will not yield a great deal of revenue. An increase in income tax would raise serious misgivings, and arouse much popular resistance. There

is therefore a threat of higher inheritance and wealth taxes. Such taxes would be bound up with new financial difficulties. Tangible assets would have to be converted into ready cash.

Always and again the magic of money presents us with problems. These problems change constantly. Time after time experience teaches us that there is no universally-valid system by means of which monetary problems may be solved. Every new situation demands new deliberations, new measures, new insights, new ideas. Each of these ideas must be informed by and subservient to the sole and single purpose of maintaining the soundness of the currency.